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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. 149. 19

THOMAS D. PEARCE, APPELLANT,

vs.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL COTTLE, AND SAMUEL P. BARKER.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED JUNE 13, 1877.

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No. 149.

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1 The President of the United States of America to Thomas D. Pearce, Frank Kursh, and Frank Ferrale, greeting:

You are hereby commanded that you and each of you personally appear before the judges of the circuit court of the United States of America for the southern district of New York, in the second circuit court, in equity, on the first Monday of May, A. D. 1874, wherever the said court shall then be, to answer a bill of complaint exhibited against you in the said court by Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker, and to do further and receive what the said court shall have considered in that behalf. And this you are not to omit under the penalty on you and each of you of two hundred and fifty dollars.

Witness honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, at the city of New York, on the second day of April, in the year one thousand eight hundred and seventy-four, and of the Independence of the United States of America the ninety-eighth.

[SEAL.] KENNETH G. WHITE, *Clerk.*

LEE & ALVORD, *Sol'r.*

The defendants are required to enter appearance in the above cause in the clerk's office of this court on or before the first Monday of May, 1874, or the bill will be taken pro confesso against them and each of them.

K. G. W., *Clerk.*

2 The within-named defendant not found.
Ap'l 15, 1874.

OLIVER FISKE,
U. S. Marshal.

(Indorsed:) Filed Ap'l 15, '74.

3 The President of the United States of America to Thomas D. Pearce, Frank Kursh, and Frank Ferrale, greeting:

You are hereby commanded, as we have before commanded you, that you and each of you personally appear before the judges of the circuit court of the United States of America for the southern district of New York, in the second circuit court, in equity, on the first Monday of June, A. D. 1874, wherever the said court shall then be, to answer a bill of complaint exhibited against you in the said court by Lewis J. Mulford, Seth W. Hale, Shubael Cottle, & Samuel P. Barker, and to do further and receive what the said court shall have considered in that behalf. And this you are not to omit under the penalty on you and each of you of two hundred and fifty dollars.

Witness honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, at the city of New York, on the fifteenth day of April, in the year one thousand eight hundred and seventy-four, and of the Independence of the United States of America the ninety-eighth.

[SEAL.] KENNETH G. WHITE, *Clerk.*

LEE & ALVORD, *Sol'r.*

The defendants are required to enter appearance in the above cause in the clerk's office of this court on or before the first Monday of June, 1874, or the bill will be taken pro confesso against them and each of them.

K. G. W., *Clerk.*

4 I hereby certify that on the 15 day of April, 1874, at the city of New York, in my district, I personally served the within writ upon the within-named Thomas D. Pearce by exhibiting to him the within original writ, and at the same time leaving with him a copy thereof. The other within-named defendants not found.

N. Y., Ap'l 20, 1874.

OLIVER FISKE,
U. S. Marshal.

(Indorsed :) Filed Ap'l 20, 1874. 49.

5 United States circuit court, southern district of New York. In equity.

To the honorable the judges of the circuit court of the United States for the southern district of New York, in chancery sitting:

Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker, of the city and State of New York, and citizens of the State of New York, copartners, composing the firm of Mulford, Hale & Cottle, of the city of New York, bring this bill against Thomas D. Pearce, Frank Kursh, and Frank Ferrale, of the city of Philadelphia, in the State of Pennsylvania, and citizens of the State of Pennsylvania, copartners, doing business at said cities of New York and Philadelphia, under the firm name of Pearce, Kursh & Company.

And thereupon your orators complain and say, that in or before the year 1874 one Shubael Cottle, of the city of New York, in the State of New York, being the original and first inventor of a new and use-

6 ful improvement in chains and chain links for necklaces, &c., not known or used before, and not at that time in public use, or on sale with his consent or allowance for more than two years, made application to the proper department of the Government of the United States for the grant of the letters patent therefor, in accordance with the laws of Congress.

And your orators further represent and show that the said Shubael Cottle, by assignment, dated the fifth day of January, 1874, duly assigned and transferred to your orators, under the said firm name of Mulford, Hale & Cottle, the full and exclusive right to all the said invention and improvements, as fully set forth and described in the specification prepared and executed preparatory to the obtaining of letters patent therefor, which said assignment was duly recorded in the Patent Office, and to which said assignment, ready to be produced as this court may direct, or to a certified copy thereof, your orators beg leave for greater certainty to refer.

And your orators further represent and show that thereupon

7 afterwards, to wit, on the third day of February, 1874, letters patent of the United States, signed, sealed, and executed in due form of law, were issued to your orators, bearing date the said third day of February, 1874, and numbered 147045, granting, according to law, to your orators, their heirs, and assigns, for the term of seventeen years from the said third day of February, 1874, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention and improvements described in a schedule annexed to the said letters patent and making part thereof, as by a certified copy of said letters patent, ready to be produced as this court may direct, will more fully appear.

And your orators further show unto your honors that afterwards, to

wit, on the twenty-fourth day of February, 1874, the said letters patent were surrendered, according to law, on account of a defective specification, and a new patent was duly issued to your orators, bearing said last-named date, in accordance with a corrected description and spec-
8 ification, and for the same improvements, whereby was granted and secured to your orators, their heirs, and assigns, under their said firm name of Mulford, Hale & Cottle, for the term of seventeen years from the third day of February, 1874, the exclusive right to make, use, and vend the said invention throughout the United States, as in and by said reissued letters patent numbered 5774, or a certified copy thereof, ready to be produced as this court may direct, will more fully appear.

And your orators further represent and show that from the issuing of said letters patent the right of your orators to the exclusive use and enjoyment of said invention, as covered by said letters patent, and acquiesced in by the public, was generally respected; and your orators have received and enjoyed a considerable income from the use of said invention.

And your orators further represent and show that they have never acquiesced in any invasion or infringement of their rights in the premises.

9 And your orators further represent and charge, upon information and belief, that said defendants hereto, since the reissue of said letters patent, on the twenty-fourth day of February, 1874, as aforesaid, well knowing the premises, and intending and devising to infringe upon and violate the exclusive rights of your orators, under and by virtue of said reissued letters patent numbered 5774, have been engaged, in the county of New York and State of New York, and at various other places in the United States, and without any license or authority so to do, in manufacturing, using, and selling large quantities of goods, wares, and merchandize involving the invention secured to your orators as aforesaid, and being articles of manufacture and trade of which the exclusive right to make, construct, and vend to others to be used is secured to your orators by said letters patent, none of said articles so manufactured, used, vended, or sold by said defendants having been made by any person or persons authorized or licensed to use the said patented invention; all of which acts of the said de-
10 fendants are in flagrant violation of the exclusive rights of your orators under and by virtue of said reissued letters patent hereinbefore mentioned; and by means of the premises the defendants have infringed upon, and still continue to infringe and violate, the said exclusive rights and privileges of your orators secured to them by said reissued letters patent.

In consideration whereof, and for as much as your orators can only have adequate relief in a court of equity, where matters of this nature are properly cognizable, to the end therefor' that the said defendants may, if they can, show why your orators should not have the relief hereby prayed, and that the said defendants may, upon oath, to the best and utmost of their knowledge, remembrance, and belief, full, true, and perfect answer make hereto, and to such of the several interrogatories hereinafter mentioned and set forth, as they are required to answer; that is to say:

11 1st. Whether letters patent were not issued to your orators, as assignees of Shubael Cottle, as herein set forth, and whether the same were not surrendered and reissued as herein set forth, and whether your orators are not now the sole and exclusive owners thereof?

2nd. Whether the said defendants have not since the date of said reissued letters patent as aforesaid, in the county of New York and State of New York, and at various other places in the United States, manufactured, used, or sold various articles made in accordance with the inventions covered by said letters patent without any license or authority so to do?

3rd. What amount of such articles, made in accordance with said invention, the said defendants have so sold since the date of said reissued letters patent, and what profit has been made or derived therefrom by the said defendants?

And your orators further pray that the said defendants may be
12 forthwith restrained, by a writ of injunction issuing out of and under the seal of this honorable court, from making or vending any article involving or embracing, or manufactured in pursuance of the invention secured to your orators, by virtue of said reissued letters patent numbered 5774, and from all violations or infringements of exclusive rights of your orators under or by virtue of said reissued letters patent, and that on the final hearing of this cause the said injunction may be made perpetual.

And further, that the said defendants may be decreed to account to your orators for all profits realized by them from the manufacture or sale of articles made pursuant to the said invention, as secured by your orators by said reissued letters patent bearing date the twenty-fourth day of February, 1874, in violation of the exclusive rights of your orators, and also to pay to your orators, in addition to said profits, the damages which have been sustained by your orators by reason of said infringement, and that your orators may have such other and
13 further relief in the premises as the nature of the case may require, and as may be according to equity and good conscience.

And may it please your honors to grant your orators a writ of subpœna, to be directed to the said defendants, Thomas D. Pearce, Frank Kursh, and Frank Ferrale, commanding them, at a certain day and under a certain penalty, to be and appear before this honorable court and then and there full, true, direct, and perfect answer to make to all and singular the premises, whether specially interrogated thereto or not, and further to stand to, abide by, and perform such further orders, directions, and decrees therein as to your honors shall seem meet and proper.

L. J. MULFORD.
SETH W. HALE.
S. COTTLE.
S. P. BARKER.

LEE & ALVORD,
Compl'ts' Sol'rs.
A. A. ALVORD,
Of Counsel.

NOTE.—Each defendant is required to answer each interrogatory.

14 UNITED STATES OF AMERICA,
Southern District of New York, ss:

At the city, county, and State of New York, on this first day of April, 1874, before me, personally appeared Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and on the second day of April, 1874, Samuel P. Barker, who sign the foregoing bill and severally made oath that they have read and understand the same and the contents thereof, and that all

the matters therein stated as of the knowledge of the complainants are to their knowledge true, and as to all other matters therein stated they verily believe them to be true.

Before me.

[L. S.] R. A. PIPER,
Notary Public.

15 (Indorsed:) U. S. circuit court, southern district of New York. Lewis J. Mulford and others vs. Thomas D. Pearce and others. Bill of complaint. Lee & Alvord, compl'ts' sol'r, 20 Nassau st., N. Y. Filed Ap'l 21, 1874.

16 C. C. U. S. southern district of New York, in equity.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL Cottle, and Samuel P. Barker
vs.
THOMAS D. PEARCE & FRANK KURSH.

To clerk U. S. circ. court so. dist. N. Y.:

Please enter the appearance of Thomas D. Pearce, one of said defendants, by—

HENRY BALDWIN, JR.,
Per J. C. F.

MAY 30, 1874.

(Endorsed:) Filed June 1st, 1874.

17 United States circuit court, southern district of New York. In equity.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL Cottle, and Samuel P. Barker
vs.
THOMAS D. PEARCE, FRANK KURSH, AND FRANK Ferrale, trading as Pearce, Kursh & Co.

The separate answer of Thomas D. Pearce, defendant, to the bill of complaint of Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker, complainants.

This defendant now and at all times hereafter, saving and reserving to himself all and all manner of benefit and advantage of exception or otherwise that can or may be had or taken to the manifold errors, uncertainties, and imperfections in said bill of complaint contained, for answer to said bill, or to so much and such parts thereof as he is advised it is material or necessary for him to make answer unto, answering says:

I. He denies that Shubael Cottle in said bill mentioned in or
18 before the year 1874 was the original and first inventor of a new and useful improvement in chains and chain-links for necklaces, &c., not known or used before and not at that time in public use or on sale for more than two years, but he is informed and believes and therefore admits that on or about the tenth day of January in said year, 1874, said Cottle did make application for letters patent of the United States for an alleged improvement in chain necklaces.

He further admits that letters patent of the United States were

issued under date of February 3d, 1874, No. 147045, to Mulford, Hale & Cottle of New York City, in the State of New York, as assignees of said Cottle, for an alleged "improvement in chains for necklaces, &c.," and he further admits that said letters patent were afterwards surrendered and a new patent issued to the said Mulford, Hale & Cottle, assignees, under date of February 24th, 1874, entitled "Reissue No. 5774, improvement in chains and chain-links for
19 necklaces," &c., *for* alleged improvement consisting, as described and shown and specified in the specification and drawing forming part of said reissued letters patent, of an ornamental chain for necklaces, &c., formed of alternate closed links A and open spiral links B, substantially as shown and described, and of the open spiral link B formed of coils of tubing substantially as shown and described in said specification and drawing, but this defendant denies that said alleged invention was new and useful; he denies that said Cottle was the first and original inventor of said alleged improvement; he denies that such chains had not been in public use and on sale for more than two years before said application for said letters patent No. 147,045, and he denies that said letters patent secured to said complainants the exclusive right to make, use, and vend the said alleged invention throughout the United States for the term of seventeen years from the 3d day of February, 1874, as alleged in said bill of complaint.

20 Upon information and belief he denies that from the issuing of said letters patent the right of these complainants to the exclusive use and enjoyment of the said alleged invention as covered by said letters patent was acquiesced in by the public, or was generally respected, and he is advised and believes, and therefore avers, that if these complainants have, as alleged in their said bill, received and enjoyed a considerable income from the use of said alleged invention, they have received and enjoyed such income, not under or by virtue of said letters patent or of any acquiescence in the validity thereof, but entirely aside therefrom; and he further denies that between the 24th day of February, 1874, the date of said reissued letters patent, and the 2d day of April, 1874, the date at which said bill of complaint was filed, there was any acquiescence by the public in the validity of said reissued letters patent, or any respect paid to the pretended rights of these com-
21 plainants under said reissue, or any considerable income received and enjoyed by these complainants from the use of said alleged invention.

II. This defendant, further answering, denies that since the reissue of said letters patent on the twenty-fourth day of February, 1874, as aforesaid, and intending and devising to infringe upon and violate the alleged exclusive rights of these complainants under and by virtue of said reissued letters patent No. 5774, he has been engaged in the county of New York and State of New York, and at various other places in the United States, in manufacturing, using, and selling large quantities of goods, wares, and merchandise involving the alleged invention secured to these complainants as in said bill alleged, and being articles of manufacture and trade, of which the exclusive right to make, construct, and vend to others to be used, is secured to these complainants by said letters patent; and he further denies that he has infringed, or still
22 continues to infringe upon and violate any exclusive rights and privileges of these complainants secured to them by said reissued letters patent.

III. And this defendant, further answering, says to the interrogatories numbered and set forth in said bill specially as follows:

To the first of said interrogatories he answers, that he believes letters patent were issued and reissued to Mulford, Hale & Cottle, assignees of Shubael Cottle, as hereinbefore set forth, but whether or not these complainants are now the sole and exclusive owners thereof he does not know and cannot say, and he leaves these complainants to make proof thereof as they may be advised.

To the second and third of said interrogatories he answers, that he has, since the date of said reissued letters patent, in the county of New York and State of New York, and at various other places in the United States, manufactured, used, or sold various articles made in accordance with the alleged inventions covered by said letters
23 patent, nor has he had any license or authority from these complainants so to do.

IV. And this defendant, further answering, says that Shubael Cottle, in said bill mentioned, was not the original and first inventor of chains or of chain links for necklaces, &c. He was not the original and first inventor of closed links, or of spiral links, or of open spiral links substantially such as are shown and described in said reissued letters patent. He was not the original and first inventor of closed links, or of open links, or of spiral links, open or closed, and finished separately before being formed into a chain. He was not the original and first inventor of open spiral links formed of coils of tubing, or of tubing for forming spiral links, open or closed, that could be finished separate and then put together to form a chain. He was not the original and first inventor of ornamental chains for necklaces, &c., formed of alternate closed links and open links, or of alternate closed links and open spiral links, but that long prior to the alleged invention of said Cottle chains and chain links for necklaces, &c., links open and closed, round and oval, spiral and open, and spiral and closed links, formed of coils of tubing, and links of divers forms, finished separately and then
24 formed into chains, and chains formed of alternate open and closed links, and of alternate closed links and open spiral links, had been in public use and on sale within the United States, and amongst others such use and sale was had and made by the following-named persons and at the following-named places prior to the said alleged invention of said Cottle, viz: Isaac Dixon and Samuel G. Dixon, of and at Philadelphia, Pennsylvania; Samuel F. Knight, of and at Providence, Rhode Island; this defendant, Thomas D. Pearce, of and at said Philadelphia, and at New York City; John B. Aignier, John C. Downing, Moses G. Baldwin, Enos Richardson, Joseph F. Chatellier, William Spence, Augustus W. Sexton, and Richard N. Peterson, all of and at the city of New York, in the State of New York; Edward Newlin, Joseph Hildeburn, Harry Hildeburn, and Frank Kursh, all of and at Philadelphia, Pennsylvania; Peter Falkner, William Kittridge, and William Aikins, all three now deceased, but formerly of New York City, and at said city. And by other persons and at other places which this defendant cannot now name with the particularity required by the statute in such case made and provided, and which he therefore prays to be allowed to add hereafter by way of amendment of this answer if he shall be so advised.

25 V. And this defendant, further answering, says that said Cottle was not the original and first inventor of any material and substantial part of the thing patented in said reissued letters patent, but that the same or a substantial and material part thereof, or material and substantial part thereof, were known and used long prior to the supposed invention thereof by said Cottle by the persons and at the

places specified in the foregoing clause of this answer, marked IV; wherefore said reissued letters patent are null and void.

VI. And this defendant, further answering, says that chains for necklaces, &c., being old, and links round and spiral, and open and closed being old, there is no patentable novelty in forming a chain of alternate open and closed links by springing them into each other, substantially as shown and described in said reissued letters patent No. 5774, and as specified in the first claim of said reissue, and that for this reason, to wit, for want of patentable subject matter, said first claim of said reissue is null and void.

VII. And this defendant, further answering, says that as he is informed and believes, for the purpose of deceiving the public, the description and specification filed by the said patentee, Shubael Cottle, in
26 the Patent Office, in the matter of his application for said reissued letters patent No. 5774, was made to contain less than the whole truth relative to his alleged invention, and that his specification forming part of said reissued letters patent does not describe any manner of forming the open-spiral link B, formed of coils of tubing, as specified in the second claim of said reissued letters patent; that open spiral links cannot be formed of coils of tubing to the best of this defendant's knowledge and belief in any way except by filling the well-known hollow wire used by jewelers and by manufacturers of jewelry for many years past with copper wire, then coiling this compound around a mandrel and cutting it at such points as desired to divide the coil into a given number of links, and them immersing these links in acid, which will eat out the copper filling and leave the hollow wire links or coils ready to be finished.

And this defendant further says that this use of hollow wire and this method of forming open spiral links was known and used amongst jewellers and manufacturers of jewelry long prior to the alleged in-
27 vention of said Cottle and by the persons and at the places specified in the foregoing clause of this answer, marked IV, and that for the foregoing reasons said second claim of said reissued letters patent is null and void, as well for want of sufficient description as aforesaid as for want of novelty and for want of patentable subject matter.

VIII. And this defendant, further answering, says that spiral links or rings have long been in public use and on sale for various purposes for key rings, bracelets, watch-guards, and divers other purposes, and that there is no patentable invention in alternating rings or links of different forms to form a chain or chain-necklace, and this defendant more than ten years ago sold at the city of Philadelphia chains composed of alternate closed links and open spiral links substantially as shown and described in said reissued letters patent No. 5774, except that said spiral links were not formed of coils of tubing. And for these reasons, as this defendant is advised and believes, the said reissued letters patent are null and void.

Without this that there is any other matter, cause or thing in the said complainants' said bill of complaint contained material or necessary for this defendant to make answer unto, and not herein and
28 hereby well and sufficiently answered, traversed, confessed and avoided, or denied, true to the knowledge or belief of this defendant; and he humbly prays this honorable court to be hence dis-

missed with his reasonable costs and charges in this behalf most wrongfully sustained.

THOMAS D. PEARCE.

JOS. C. FRALEY,
Sol'r and of Counsel for Def't.
HENRY BALDWIN, JR.,
Of Counsel.

UNITED STATES OF AMERICA,
Eastern District of Penn'a, ss:

Thomas D. Pearce, the above-named defendant, having been duly sworn, deposes and says that he has read the above answer by him subscribed and knows the contents thereof, and that the same is true to his own knowledge except as to facts which are therein stated to be upon information and belief, and these he believes to be true.

THOMAS D. PEARCE.

Sworn and subscribed before me this 26th day of June, A. D. 1874.
[S. L.] GEO. N. WATSON,
Notary Public.

29 (Indorsed:) U. S. C. C., so. dist. of N. Y. In equity. Mulford et al., vs. Pearce et al. Answer of Thomas D. Pearce. Jos. C. Fraley, Henry Baldwin, jr., of counsel for def't. Filed July 6, 1874.

30 Circuit court of the United States for the southern district of New York.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL Cottle, & Samuel P. Barker,
vs.
THOMAS D. PEARCE, FRANK KURSH, AND FRANK Ferrale.

These repliants, saving and reserving unto themselves all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto say, that they will aver and prove their said bill to be true, certain and sufficient in the law to be answered unto; and that the said answer of the defendants is uncertain, untrue, and insufficient to be replied unto by these repliants; without this, that any other matter or thing whatsoever, in the said answer contained, material or effectual in the law to be replied unto, confessed and avoided, traversed or denied, is true. All which matters and things these repliants are, and will be ready to aver and prove, as this
31 honorable court shall direct; and humbly pray as in and by their said bill they have already prayed.

LEE & ALVORD,
Compl'ts Sol'rs.
B. F. LEE,
Of Counsel.

32 (Indorsed:) U. S. circuit court southern district of New York. Lewis J. Mulford, et al. vs. Thomas D. Pearce, et al. Replication. Lee & Alvord, solicitors for complainants. 20 Nassau st. Eq. No. 6, p. 315. Filed July 18, 1874.

33 COMPLAINANTS' PROOFS.

Circuit court of the United States for the southern district of New York. In equity.

LEWIS J. MULFORD ET AL.
vs.
THOMAS D. PEARCE ET AL.

Proofs for final hearing taken on the part of the complainants, under and pursuant to the sixty-seventh rule in equity, before Joseph Gutman, jr., examiner:

NEW YORK, *July* 31, 1874—11 a. m.

Present, A. A. Alvord, esq., of counsel for complainants; and Joseph C. Fraley, esq., counsel for defendants.

34 Counsel for complainants offers in evidence a certified copy of letters patent granted to Mulford, Hale & Cottle, February 3, 1874, No. 147045, for "improvement in chains and chain-links for necklaces." It is marked Complainants' Exhibit A.

Also, certified copy of reissued letters patent granted to Mulford, Hale & Cottle, dated February 24, 1874, No. 5774, for "improvement in chains and chain-links for necklaces." It is marked Complainants' Exhibit B.

Also certified copy of assignment by Shubael Cottle to Mulford, Hale & Cottle, of the invention for which the letters patent were granted, dated January 5, 1874. It is marked Complainants' Exhibit C.

United States circuit court southern district of New York.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL Cottle, and Samuel P. Barker,
vs.
THOMAS D. PEARCE, FRANK KURSH, AND FRANK Ferale, trading as Pearce, Kursh & Co.

Testimony taken on part of complainants, in rebuttal, under and in pursuance to the sixty-seventh rule of the supreme court, in equity:

NEW YORK, *October* 30*th*, 1874.

Present, B. F. Lee, esq., counsel for complainants, and Joseph C. Fraley, esq., counsel for defendants.

35 SETH W. HALE, being duly sworn as a witness on the part of complainants, deposes and says:

Q. 1. What is your name, age, residence, and occupation?

A. Seth W. Hale; age, fifty-two years; residence, New York City; occupation, jeweler.

Q. 2. Are you one of the complainants and a member of the firm of Mulford, Hale & Cottle?

A. Yes, sir.

Q. 3. Have you read the letters patent, reissue, No. 5774, dated February 24th, 1874, on which this suit is brought, and do you understand what is described and claimed therein?

A. Yes, sir.

Q. 4. Can you produce a specimen of what is described and claimed

in said reissued letters patent? And if yea, please produce the same, to be marked as an exhibit in this cause.

A. I can produce such specimen; I produce it as an exhibit.

(The specimen produced by witness offered in evidence and the same is marked Complainants' Exhibit No. 1, J. A. S., Ex.)

Q. 5. The inventor, Shubael Cottle, is a member of your firm, is he not?

A. Yes, sir.

Q. 6. When did your firm put on the market chains like Complainants' Ex. No. 1, made in pursuance of the instructions of Mr. Cottle?

A. The 18th of July, 1873.

Q. 7. Have you sold them continuously since that time?

A. Yes, sir.

Q. 8. What quantity of such chains has your firm made and sold since the 1st day of February, 1874?

A. About six hundred, of the value of about $25,000.

36 Q. 9. Has the period since the 1st of February, 1874, been a favorable one for the sale of such articles, having reference to the commercial and financial condition of the country?

(Objected to as leading.)

A. I should say not.

Q. 10. Are the months of November, December, and January more or less favorable months for the sale of jewelry than the rest of the year?

(Same objection.)

A. They are more favorable, taking the average of the three months; December is worth more than any other two months in the year.

Cross-examined by Mr. FRALEY:

X Q. 11. What articles do you find described in reissue 5774?

A. Necklaces.

X Q. 12. How often have you read said letters patent?

A. I think I never read it but once in detail.

X Q. 13. Then I understand you to say that what you find described and claimed therein is "necklaces"?

A. Necklaces or rather chains.

X Q. 14. How are they made?

A. They are made with an alternate closed link and an open spiral link; I know what it is, but I am not a practical jeweler and may not be able to express it properly.

X Q. 15. Do you find any method of making them described in the said reissue?

A. I find that they are made of a hollow closed link and a hollow spiral link looped together.

X Q. 16. Then I understand you to say that the method of making the articles described and claimed in reissue 5774, is the looping together of two links?

37 (Objected to as incompetent, as the witness is not called as an expert in the art of manufacturing chains, &c., and does not pretend to be a practical manufacturing jeweler, and is only called for the purpose of proving when the sales of a certain article (Ex. No. 1) took place, and the extent of such sales during a certain period.)

A. I do not know that it is altogether the looping together of two links, but it is the method of making them and putting them together.

X Q. 17. How far do you find a description of the method of making them contained in said reissue 5774?

(Same objection.)

A. I must say I know very little about it.

X Q. 18. Question repeated.

(Same objection.)

A. I don't know as I have any other answer to make; I know very little about it; I can read you the whole patent.

X Q. 19. Is there no part of the patent which describes the method of making the links?

(Same objection.)

A. Well, I suppose they may both be made polished, or both be made colored; one round and one oval, or both oval; they can be made and finished before being put together.

X Q. 20. Please read from the reissue that part which describes how they are made and finished before being put together.

(Same objection.)

38 A. "A and B represents the link of the chain; the links A are round and closed as shown in Figure 1, and are made and polished or colored separately from the other links. The links B, which constitute the peculiar feature of my invention, are formed by one or more coils of tubing of the length so as to form a double spring-link; into each end of the tube forming the link B, is soldered a small shot, as shown in the drawing, which shot gives a finish to the link. The links B may then be colored or polished, and the chain is formed by springing the links into each other. The links A and B may be made, one kind round and the other oval, or both may be made round or both oval. Either kinds of the links A and B may be polished and the other colored, or both may be polished or both colored. Finishing the separate links in this way enables them to be more perfectly polished or colored, and with a greatly diminished expenditure of labor and time, and enables the links to be put together without injuring them in the least, however highly they may be polished or colored."

X Q. 21. Is that the only description of the method of making and finishing the links which you find described in said reissue?

(Same objection, and as indefinite.)

A. I should think that covered it all.

X Q. 22. How many chains like Complainants' Exhibit No. 1, did you put on the market on the 18th of July, 1873?

A. I should think about a half a dozen, perhaps not more than four.

X Q. 23. Who made those chains?

A. Our firm produced them—made in our factory—superintended by Mr. Cottle.

X Q. 24. Then you do not know what workman made these chains?

39 A. No, sir; I do not.

X Q. 25. How, then, do you know that they were made in pursuance of the instructions of Mr. Cottle?

A. For the reason that all goods manufactured by us are made by his instructions.

X Q. 26. Do you mean to say that no goods are ever made in your factory unless Mr. Cottle tells the workmen how to make them?

A. I don't know as he ever tells them how to make them; I haven't claimed that he told them how to make them.

X Q. 27. Then you did not mean in your answer to question 6, that Mr. Cottle told your workmen how to make the chains which you sold on the 18th of July, 1873?

A. I mean he instructed them to make them according to samples which had been previously made.

X. Q. 28. Where did the samples come from?

A. From our factory.

X Q. 29. Who made them?

A. Mr. Cottle, I suppose; I saw them making in our factory; I can't name the workman's hand they passed through, except Mr. Baldwin, the polisher.

X Q. 30. Do you know who polished the links or colored them?

A. No, sir, I do not; Mr. Baldwin is our foreman in the polishing department.

X Q. 31. Do you know who sprung the links together?

A. I do not.

X Q. 32. Do you know whether the links were polished or colored before they were sprung together?

A. I think I know they were.

X Q. 33. Why did you think so?

A. I saw them in the polishing box before they were put together, and I take it for granted that they were polished before being put together.

X Q. 34. Is it impossible to polish the links after they are put together in a chain?

(Same objection as to X Question 21.)

40 A. I should say it was.

X Q. 35. Then you mean chains have always been made by polishing the links separately before they are put together?

(Same objection.)

A. Yes, sir; so far as I know; I don't know anything about the subject; I am not a practical man; I never polished one in my life; I know what I can sell and what I can get for it, but I know nothing about manufacturing, although I have been in the jewelry business twenty-five years; I desire to explain, that in the four last questions, I thought you referred only to batch of chains that came from our factory to our office, on the 18th of July, 1873.

X Q. 36. Did your firm never make chains of which the links were finished separately before those which you have referred to as coming to your office on the 18th of July, 1873?

A. Not unless it was some of those same patterns which might have been finished before that, for which we claim a patent.

X Q. 37. Have you never, in your experience as a jeweler, before that time seen chains, the links of which had been finished separately?

(Same objection as to cross-question 35.)

A. I don't know that I have.

X Q. 38. Have you never seen chains of which some of the links were split rings?

A. I don't know that I have.

Redirect:

Q. 39. Please state what reasons you have for saying that the chains of July 18th, 1873, like Complainants' Exhibit No. 1, were made in pursuance of instructions given by Mr. Cottle.

A. Because all orders of any large amount pass through his hands.

41 Recross:

Recross Q. 40. From whom did the orders for these chains come?

A. From Mr. Cottle.

Recross Q. 41. For whom were they made?

A. For our firm.

Recross Q. 42. How do you know the order came from Mr. Cottle?

A. When new patterns are made, he always makes them.

SETH W. HALE.

Subscribed and sworn to before me this 30th day of October, 1874.
JOHN A. SHIELDS, *Exr.*

SHUBAEL COTTLE, being duly sworn as a witness on part of complainants, deposes and says:

Q. 1. What is your name, age, residence and occupation?

A. Shubael Cottle; age, 34 years of age; residence, New York City; occupation, jeweler.

Q. How long have you been a jeweler, and in what manner have you been engaged in that business?

A. I have been a jeweler 16 years; the first six years I was engaged in repairing jewelry—repairing watches, manufacturing and selling; the next two years in selling jewelry, and the last eight years in manufacturing jewelry.

Q. 3. Have you been, and are you now, thoroughly acquainted with the business of manufacturing jewelry practically; and if yea, for how long a period?

A. Well, I have been engaged in manufacturing more or less for sixteen years, practically; my answer to the first part of the question is, yes; I have been thoroughly acquainted with the manufacture of jewelry practically for the last eight years; before that I might say I was learning the business.

42 Q. 4. Are you the inventor for whose invention the letters-patent on which this suit is brought were granted?

A. I am.

Q. 5. Have you made other inventions for which letters-patent of the United States were granted, relating to the jewelry business?

(Objected to as irrelevant.)

A. I have; at least ten in number.

Q. 6. Are you familiar with the specifications of the reissued letters-patent 5774, on which this suit is brought? and if yea, please refer to a model of what is described and claimed in said letters-patent, and describe the nature and advantages of this invention.

A. I am familiar with such specifications; Complainants' Exhibit No. 1 is a model of the invention; the invention is a chain composed of closed links, and open spiral links formed of coils of tubing, thereby making a spring link; the spiral link, formed of coils of tubing, must be of tubing in order to make a spring link as described in the reissued patent; the advantages of the inventions are, that the links can be made and then finished before putting together, and thereby be more perfectly finished, and at much less expense. The chain can be worn as a necklace, shortened or lengthened at the will of the wearer; it can be worn as bracelets, by taking it apart in the middle, and fitted to the arm, by using as many links as required, or you can make a bracelet of a different pattern by springing the spiral links together. The spiral links can be used by linking into rings of any kind, such as shell, onyx, jet or any other rings, or any other pieces that have holes in them, that will take the spiral, and thereby make any number of patterns. These spiral links can also be used as armlets for catching up the sleeves of small children. These spirals can also be used as ornaments for ladies' hair, by taking any number of links that you may require, and fasten

43 them in the hair. It can also be used as a handkerchief holder, and can be used for holding fans while the lady is dancing.

Q. 7. In putting together spiral links formed of coils of tubing, as described in reissue 5774, either together or with alternate closed links, the same being already before being joined delicately polished or col-

ored, is the polish or color marred or injured by such putting together? and give the reason for any statement you may make on the subject.

(Objected to as leading.)

A. It does not injure the polish or color, for the reason that the spiral link being made of tubing becomes very elastic or springy, and can be sprung one into the other without resistance enough to injure the polish or color.

Q. 8. In speaking, in your sixth answer, of the various uses to which these spiral links can be put, please state how and by whom these several adjustments can be made, and whether they can be effected with a single necklace.

A. These several adjustments can be made by the fingers by a man, woman, or child, and can be effected with a single necklace.

Q. 9. State what injury, if any, will be done to the color, polish, or finish of the several links, by making the adjustments spoken of by a wearer, not a jeweler, and give the reasons for any statement you may make.

A. It would do no injury, because the spiral link made of hollow tubing is springy, and does not give resistance enough in springing one link into the other to injure the polish or color in the least.

Q. 10. When the open spiral links formed of coils of tubing, as described in your patent, are separated for the purpose of springing them on and off, for making the several adjustments of which you have spoken, are they liable or not to spread apart, so as to injure the spiral link?

44 A. They are not, because they are formed of hollow tubing.

Q. 11. Suppose that the spiral link of Complainants' Exhibit No. 1 was composed of solid gold instead of tubing, would it make a spiral spring link practically useful for the purposes to which the open spiral link described in your patent can be put, as you have before described? and give your reasons for any statements you may make.

Objected to as leading and incompetent.)

A. It would not, for the reason that it being solid wire it would not be a spring link, and also for the reason that it could not be taken apart and put together with the fingers without the use of tools.

Q. 12. Please state how gold ranks among metals in respect to elasticity.

A. You can make as good a spring of gold as of any metal, except tempered steel; there is no more elasticity to pure gold than there is to lead; I didn't understand the question at first.

Q. 13. Can you produce specimens of spiral links like those shown in Complainants' Ex. No 1, made of solid gold?

A. I can, and I do.

(Link produced by witness offered in evidence, and the same is marked Complainants' Ex. No. 2, J. A. S., Ex'r.)

Q. 14. Can you demonstrate by experiment with spirals of solid gold wire, like Exhibit No. 2, the statements contained in your eleventh answer?

A. I can so demonstrate. I now take a spiral exactly like Complainants' Ex. No. 2; I cannot separate it with my fingers; I pry the end up with the point of a scissors far enough to allow a ring like the circular ring in Complainants' Ex. No. 1 to enter between the coils, then screw it in; the effect is that it leaves the spiral spread apart; I offer the two rings thus attached in evidence.

45 (Same offered in evidence, and marked Complainants' Ex. No. 3, J. A. S., Ex'r.)

Q. 15. Of what kind of gold is Complainants' Ex. No. 3 composed?

A. The same kind of gold as Complainants' Ex. No. 1.

Q. 15. Will you produce a spiral composed of tubing like that described in your patent made of precisely the same gold as Complainants' Ex. No. 3, and spring it upon the ring now attached to Complainants' Ex. No. 3, and state what the effect of this experiment is?

A. I produce such spiral, and spring it upon the ring in Complainants' Ex. No. 3; it can be done with perfect ease with the fingers, and springs right together.

(The spiral composed of tubing last referred to offered in evidence, and marked Complainants' Ex. No. 4, J. A. S., Ex'r.)

Q. 17. How far can you spread apart a spiral composed of hollow tubing, such as described in your patent, and of the dimensions of the hollow spiral now shown to you, being one of those taken from Exhibit No. 1, and offer the same in evidence, and state the result of the experiment; the measurement to be taken transversely from end to end of the spiral?

A. I can spread it a half an inch; and I offer the same in evidence, after having done so.

(The hollow spiral link referred to offered in evidence, and marked Complainants' Ex. No. 5, J. A. S., Ex'r.)

Q. 18. Are these five exhibits composed of the same kind of gold? and state whether or not this is the usual gold used for that kind of jewelry.

46 A. They are all of the same kind of gold, and the same we have always used, and the same that is used generally in the jewelry trade.

Q. 19. Have you tried any experiments in constructing gold chains like Defendants' Ex. A? and, if yea, please state the result of such experiments.

A. I have, and find that the links cannot be put together after they are finished with or without the use of tools without spoiling the finish of both links, and leaving the circular link or split ring spread apart.

Q. Will you repeat the experiment here in presence of the examiner?

A. I will; I produce a split ring like the one in Defendants' Ex. A; it is perfectly solidly closed now; I find it impossible to separate it with my fingers; it is composed of the same kind of gold as all the other exhibits. I produce also a colored long or square link, like the long link in Defendants' Ex. A; I pry open the split ring with a knife far enough to enter the oblong link, and then screw them into each other; I now have them together; the oblong link has the color and finish spoiled by the process of springing one into the other, and the split ring is spread apart and the edges are not so sharp as they were before, but I do not think this last effect is very noticeable, except on the ends. I offer in evidence the two links.

(The links offered in evidence, and the same are marked Complainants' Ex. No. 6, J. A. S., Ex'r.)

Adjourned to October 31st, 1874, at 10 a. m.

47 SATURDAY, *Oct. 31st*, 1874.

Present, counsel as before.

Continuation of the examination of Shubael Cottle.

Q. 21. How many times has the split ring, Complainants' Ex. No. 6, had anything passed through it since it was made?

A. Just this once in the presence of the examiner, as described in the last answer.

Q. 22. Suppose the long link was taken off and replaced several times, what would be the effect?

A. It would spread the split ring a little more each time and mar the oblong link.

Q. 23. State whether or not the split rings in gold chains, like Ex. A, and like Complainants' Ex. No. 6, were designed to be removable so as to lengthen or shorten the chain when in use at the pleasure of the wearer?

(Objected to as irrelevant and incompetent.)

A. They were not.

Q. 24. State your reasons for your last answer.

(Same objection.)

A. For the reason that it is not practical, because it could not be done without the use of tools, and because it would spoil the finish of the split rings and the oblong links.

Q. 25. State whether or not gold chains like Ex. A, and Complainants Ex. No. 6, could be made by taking the split rings and oblong links and completely finishing, polishing, or coloring them, and then springing them together so as to make a practical, perfect finished chain without further finishing after the chain is put together; give the reasons for any statement you may make.

48 A. It could not be done; for the reason that in springing the links together the links would be so injured that the split ring would have to be annealed together, and both links be finished and polished to make the chain perfect.

Q. 26. What is annealing?

A. Heating to a sufficient heat to take the spring out; we heat it to a cherry-red heat.

Q. 27. Describe minutely how split rings are made.

A. We take gold wire, or wire, wind it around a mandril, then take it from the mandril, cut it off in piece of two or more coils, and place the pieces between two dies, and force with a drop hammer. One of these dies consists of hardened steel with a hole of the outer diameter of the proposed split ring and of the depth of the proposed split ring; this forms the female die; the other die or punch is also made of hardened steel, and the bottom is made of the diameter of the interior diameter of the proposed split ring, and of the depth of the proposed split ring, with a shoulder that extends to a diameter equal to the diameter of the hole in the female die, which is the diameter of the proposed split ring; this forms the male die. We then take the pieces of two or more coils of gold wire and place them in the female die, then we place the male die into the gold coil, then we place the two dies with the gold in the female die, and the male die in the coil of gold under a drop hammer, then we drop the hammer, which is of iron and weighs about 75 pounds, a distance of three or four feet on to the top of the male die or punch three or four times, until the ends of the coil become flush with the top and bottom of the proposed split ring. Then we take the proposed split ring out of the dies and file and finish until it becomes a perfect split ring.

Q. 28. What effect upon the gold does this process have?

A. It closes the grain of the gold and hardens it, thereby making it somewhat elastic.

49 Q. 29. If one of these split rings is annealed, what effect does it have upon it?

A. It takes out all elasticity given to it by the hammering in the dies.

Q. 30. How does that affect its usefulness for the purposes of an ordinary split ring?

A. It spoils it.

Q. 31. Describe the method of making a perfect finished chain like Defendants' Ex. A or Complainants' Ex. No. 6.

A. I should spring the oblong links into the split rings, then bind with wire the coils of the split rings, so as to bring them close together, then heat the split rings to a cherry-red heat, let them cool, and take off the binding wire and finish and polish the split rings and oblong links thus connected.

Q. 32. After this process, what would be the effect upon the split ring in reference to its capacity to be taken off and replaced?

A. Well, if they were taken off, the split ring would stay spread apart, and putting it on again the split ring would be spread as before, and it would have to be annealed together again and repolished in order to make it perfect as before it was taken off.

Q. 33. Are the split rings which you have spoken of made by jewelers of hollow or solid gold wire?

A. Solid gold wire.

Q. 34. Are split rings ever made otherwise?

A. I never heard of split rings being made otherwise than of solid wire; I don't think it possible to make them otherwise.

Q. 35. You have stated that the elasticity which makes a split ring useful, is given to the gold by the compression which it receives in the die, and that annealing it afterwards destroys that elasticity; please state what effect, if any, the process of annealing has upon the elasticity of the spiral link formed of coils of gold tubing, as shown in your patent, reissue 5774.

50 (Objected to, as no mention is made of gold tubing in said patent.)

A. It has no effect upon it.

Q. 36. Can you demonstrate this by experiment?

A. I can; I have taken one of the gold spiral links made of hollow tubing, like those in Complainants' Exhibit No. 1, and spread the coils so that the ends of the coil were a half an inch apart; they flew back close together. I then bound the coils together with wire so as to keep them in place during the process of annealing; I now heat it to a cherry red, let it cool, and I now take off the binding wire and spread the coils as before, a half an inch. I offer the coils so treated in evidence.

(Coil is offered in evidence and the same is marked Complainants' Exhibit No. 7, J. A. S., Ex.)

Q. 37. Please illustrate by experiment the effect of annealing a split ring like that illustrated by Defendants' Ex. A and Complainants' Ex. No. 6.

A. I take the split ring exactly like the one shown in Complainants' Ex. No. 6, and bind it with wire the same as I did with Exhibit 7, and anneal it to a cherry red, the same as I did with Ex. 7; when cooled I removed the wires, and pry up one end with a knife far enough to enter the oblong link of Complainants' Ex. No. 6, to enter and screw the oblong link into the split ring; having passed the oblong link into the split ring, it leaves the split ring spread apart, because the temper or elasticity is taken out of the split ring by the process of annealing.

(Split ring attached to Exhibit No. 6 offered in evidence, and the same is marked Complainants' Exhibit No. 8, J. A. S., Ex.)

51 Q. 38. Look upon Defendants' Ex. B, and state whether you have ever had any experience in making gold chains such as that is designed to represent, and state the result of such experience.

A. I have had such experience. We took gold wire and wound it

around a mandril and drew out the mandril and cut the spirals into pieces of four coils and screwed them into each other, and then turned the ends of the spirals so as to conceal the ends, and bound the spirals together and soldered them in pairs so as to leave a joint between every pair. Then we rough polished the chain, then washed it out so as to get the grease and dirt out of it; then we gild the chain so as to give a rich color to the part of the inside of the coil that the polishing brush will not reach; then we polish off the gilding from the outside.

(So much of this answer as refers to the turning in and soldering of the ends of the spiral is objected to as not responsive to the question.)

Q. 39. State what experience, if any, you have had in making chains composed of coils of wire like Ex. B, and where and when, and with whom, did you have such experience?

A. I had such experience in New York while with Baldwin, Sexton & Peterson, from 1865 to 1870. My experience was such as I have stated in my answer to question 38.

(Same objection as to answer to question 38 repeated.)

Q. 40. While you were with Baldwin, Sexton & Peterson, between 1865 and 1870, did they make chains like Exhibit B, without having the coils soldered together?

(Objected to, as the coils in Exhibit B are not soldered together, and further as leading.)

52 A. No, sir.

Q. 41. While you were with Baldwin, Sexton & Peterson, between 1865 and 1870, what was your means of knowledge on the subject last spoken of?

A. I was superintendent of their factory, and I spent a great deal of time in trying to get up a chain of that pattern—like Exhibit B, and make it successful. I did not succeed until I made an imitation of it—that is, something that looked like it to the eye; the imitation was made of strips of gold passed between rollers, one corrugated and the other smooth. Then we made rings of these strips and jumped one ring into the other, and that chain was very successful.

Q. 42. Could a chain made exactly like Exhibit B be separated and lengthened or shortened at the pleasure of the wearer without injury? and state your reasons for any statement you may make.

(Objected to as leading, and as the witness has not stated that he has ever made or seen a chain exactly like Exhibit B.)

A. It could not be lengthened or shortened at the will of the wearer, for the reason that the coils would separate and worm themselves out in wearing.

Q. 43. Can you demonstrate what you have last stated by experiment, so far as the separation of the coils is concerned?

A. I can. I now produce five coils of gold wire and screw them into each other and it spreads the coils. The coil to which the tag is attached has not been screwed into its connecting coil, but the connecting coil has been screwed into it; if it were used as a chain, the ends of the coils would catch into the clothing and spread the clothing, and finally worm themselves out.

53 (The chain referred to by witness in last answer offered in evidence, and marked Complts' Ex. 9, J. A. S., Ex.)

Q. 44. In order to bring together the coils spread as you have last stated, what, if anything, is necessary to be done in order to close them and complete the chain?

A. They should be bound together with wire across each coil, so as to bring the coils together, and then annealed.

Q. 45. Is it practicable to make a chain like Defendants' Exhibit B, or like Complainants' Exhibit 9, and finish the links separately, and color or polish them, and then spring them together?

(Objected to as leading and incompetent.)

A. It is not; it could be done, but it would not make a finished chain, for the reason that the links would be spread apart after the links were screwed together.

Adjourned to the 9th inst., at 10 a. m.

MONDAY, *Nov. 9th*, 1874.

Present, counsel as before.

Adjourned to 13th inst., at 11 a. m.

NEW YORK, *January* 5, 1875—11 a. m.

Present, counsel as before.

Examination of Shubael Cottle continued:

54 Q. 46. Will you read the eleventh, twelfth, thirteenth and fourteenth interrogatories in the deposition of Frank Kursh, one of the defendants in this suit, and state whether the article, the manufacture of which he there describes, has any definite technical name in the jewelers' art; and, if yea, state what that name is.

A. It has, and is called tubing.

Q. 47. Is there anything else known by the name of tubing in the jewelers' art?

A. No, sir.

Q. 48. In your 45th answer you say "that the links would be spread apart after the links were screwed together;" please explain the word "links" where you first use it.

A. I should have said coils would be spread apart.

Q. 49. Please look at Defendants' Exhibit E, and state what it is and what is its present condition.

A. It is a number of split rings put together and worn down very thin.

Q. 50. State if you can tell what was its condition and appearance when it was new.

(Objected to as incompetent.)

A. Yes, I think I can tell; it was a split ring of four coils of square wire, the thickness of one of these inner coils that are not worn much.

Q. 51. How has it come to its present condition?

(Same objection.)

A. By fifteen years' wear, that being the time Mr. Chatelier said it was worn.

Q. 52. Can you produce a split ring of the kind that Exhibit E was composed of before the links were worn down to their present condition?

(Same objection as to Q. 50.)

A. I can, and I now produce one.

55 (The split ring referred to by the witness put in evidence, and marked Complainant's Exhibit No. 10, J. A. S., Ex'r.)

Q. 53. Suppose a chain to be made of links like Complainants' Exhibit No. 10, sprung one upon the other, in what condition would the several split rings be after they were so sprung together to form a chain?

A. They would be marred, and the coils would be sprung apart.

Q. 54. Can you show this by experiment? and, if yea, please do so.

A. I can. I will pry up the end of the coil of the split ring, which I

now produce, and which is like Exhibit No. 10, enough to enter the Exhibit No. 10, and then screw Exhibit No. 10 into the split ring. I did it as carefully as I could, and yet the coil is spread apart.

(The split ring referred to by the witness, which has just been attached to Complainant's Exhibit No. 10, is offered in evidence, and marked Complainant's Exhibit No. 11, J. A. S., Ex'r.)

Q. 55. Have either the links, Exhibits 10 or 11, been injured in any way by the springing them together?

A. They have. No. 10 has had the polish rubbed off it where the coils of No. 11 passed over it, and the coils of No. 11 are split apart.

Q. 56. If Exhibit 10 had been composed of colored gold, what would have been the effect of this springing on?

A. It would have had the effect of scraping the color off No. 10, where the coils of No. 11 passed over it, and thus spoil the finish.

Q. 57. Would it be practicable to make a good, perfect, merchantable chain out of split rings like Exhibit 10, or like the split rings of which Defendant's Exhibit E was composed when it was new, by finish-
56 ing, polishing, or coloring the links separately, and then springing them together, so as to form a perfect chain, without further finishing?

(Same objection as to Q. 50.)

A. It would not.

Q. 58. Give the reasons for the statement you make in your last answer.

A. For the reason that the coils of the split rings would be spread apart, and could not be got together again except by annealing; then it would have to be repolished; it would spoil the color to anneal it.

Q. 59. How can a finished chain, composed of split rings like Defendant's Exhibit E, be made?

A. By springing split rings together—enough of them to make a proper length for a chain; then you would have to bind the coils together with wire, then anneal the coils until they would stay together, and then finish and polish the chain; of course the binding wires are removed after the coils are annealed.

Q. 60. After the chain is so constructed, what would be the effect of springing a link off?

A. The coils of the link that was sprung off would be spread apart; what elasticity it got from hammering in the dies, in the process of making the split rings, would be taken out in the process of annealing.

Q. 61. Then, would a chain constructed in the manner described in your 59th answer be one that could be lengthened or shortened at the pleasure of the wearer, as can be done with your patented coil link, composed of tubing, as you have stated?

A. It could not.

Q. 62. Of what kind of gold are the split rings, Complainants' Exhibits 10 and 11, composed?

A. The same as all the other exhibits here.

Q. 63. What effect, if any, has been produced upon Defendant's Exhibit E, in reference to the elasticity of the gold of which it is
57 composed, by the wearing to which it has been subjected? Please examine the exhibit, and state.

(Objected to as incompetent.)

A. In wearing it has worn down the coils very thin, and it has had the effect of hardening the gold or burnishing it by the friction of wearing, and it has given elasticity to the gold, the same as it would have got by hammering it in the dies.

Q. 64. Does the elasticity which the split rings of Defendant's Exhibit E now possess show that the rings were not annealed when the chain was made? and give the reasons for any statement you may make on the subject.

A. It does not, for the reason that if the gold of the coils were as thick as they originally were, they would be spread apart by taking them off and on, but by being worn down thin and burnished it has become hard and elastic.

(So much of the answer as refers to the original condition of Defendant's Exhibit E objected to as incompetent.)

Q. 65. Suppose the wire, of which a split ring is to be made, is ornamented by corrugation, as shown in Complainant's Exhibit No. 1, or otherwise, what effect, if any, upon such ornamentation, would the making of this wire into a split ring have?

A. It would have the effect of spoiling the corrugation or other ornamentation.

Q. 66. Suppose a closed ring of the proper size for a necklace to be sprung into a split ring of the proper size for a necklace, what effect upon the split ring would such springing together have?

A. It would leave the coils spread apart.

Q. 67. How would a jeweler close them?

A. By binding the coils together with wire, and annealing.

58 Q. 68. What is the process of coloring, as practiced by jewelers?

A. We make a mixture of salt, saltpetre and acids, then take the gold that is to be colored, anneal it, and place the gold into the mixture and boil it for a few minutes; the mixture eats the alloy out of the surface of the gold, and leaves a coating of pure gold on the surface; then we rince it off in water; then we scratch-brush it—that is, we take a brush made of wire, let a stream of beer run on to the brush, and then brush the surface of the gold; by doing so it gives an even matted surface.

Q. 69. Would it be practicable to perform this process of coloring upon a split ring, and then use it as a link of a chain?

A. No, sir; for the reason that the annealing of the split ring would take all the elasticity out of it that hammering in the dies gave it, and then the process of springing on the split rings would scrape all the color off, as the surface is soft and spongy, and it would leave the coils spread apart.

Q. 70. If the open spiral links formed of coils of tubing, described in your patent, were subjected to the coloring process, as mentioned in your 68th answer, is it practicable to then spring it upon rings or links, so as to form a chain, and what is the effect of so doing?

A. It is, as there is so much elasticity and so little resistance or friction in springing the links together, that it neither mars nor injures, in any way, either the colored or polished links.

Q. 71. Have you practically found your patented chain to be a successful article in manufacture? State how you found it appreciated by the public.

A. I have. We made and sold from the 1st of February, 1874, up to the time Mr. Hale gave his testimony, about six hundred chains, valuation about twenty-five thousand dollars. Since then we have sold all we had on hand and all we could make without interfering with

59 other goods; and have received orders nearly every day in the month of December, which we could not fill, as we had not the goods for the orders. Since Mr. Hale's testimony, I think we have sold $6,000 to $7,000 worth.

Q. 72. Have you ever had any difficulty in respect to having the form of link covered by your patent, open, when in use?

A. Only with three or four chains, that we made as an experiment, to see how thin we could get the gold, and have them serviceable; they were made for a special order; since then we have had no trouble.

Q. 73. At what date were chains like Complainants' Exhibit No. 1 put upon the market by you or your firm?

A. July 18, 1873; I looked it up once, and it had escaped my mind, and I find it from Mr. Hale's testimony.

Q. 74. From your own memory, fix the date as near as you can.

A. Some time in July, 1873; I know we made them before that; I remember of our books showing their sale in the month of July, 1873.

Q. 75. Did Mr. Frank Kursh, one of the defendants, have any conversation with you in reference to the serpent bracelet, of which he has testified in this cause; and, if yea, what was that conversation? I refer to any conversation had after his examination in this cause.

A. He did; he said that it was a stiff coil, and large enough to pass over the hands, and was intended to fit the thick part of the fore arm, and was intended to be pressed there, just as you press a finger ring on of your finger.

Q. 76. Examine Defendant's Exhibits C, D, F and I, and state whether or not by means of such constructions the objects and purposes of your patented invention can be carried out, and give your reasons for any statement you may make.

(Objected to as irrelevant and incompetent.)

60 A. The objects of my patented invention cannot be carried out in Exhibit C, for the reason that the links are soldered together, and therefore cannot be taken apart and put together at the will of the wearer; if the links were not soldered together they would not keep their place, and they would worm themselves apart; it wouldn't be a practical chain; Exhibit D is simply one link of the chain Exhibit C; Exhibit F is not a chain link, but is intended for a breast-pin or ear-ring, and the spiral is soldered on to the base of the pin—if it were not soldered it would drop off; Exhibit I has the same objection as Exhibit C.

Q. 77. In your 41st answer you say, at the end thereof, "Then we made rings of these strips, and jumped one into the other, and that chain was very successful"; how were these rings secured?

A. They were soldered together in pairs, bringing the joint inside where it would not be seen.

Q. 78. In your 43d answer you say, referring to Complainants' Exhibit 9 and Defendant's Exhibit B, "If it were used as a chain, the ends of the coils would catch into the clothing, and spread the coils, and finally worm themselves out"; how would it be if the points or ends were turned in under, so as not to catch the clothing?

A. The chain would not hang well; it would hang in a kind of a zig-zag way, for wherever the coil rested on the ends that were turned in, it would throw the coil off the centre—it would not be a pliable, practical chain.

Q. 79. Look upon Defendant's Exhibits J and J[1], and state how chains of gold could be constructed in the manner in which these exhibits are constructed, the links being previously finished and polished or colored, and afterwards sprung together, so as to form a finished chain, and state whether a finished chain can be so constructed of gold links?

A. A finished gold chain could not be so constructed of gold
61 links, and put together after the links were finished, without spoiling that finish, for the reason that in opening one link to

jump into the other, it would have to be done by the use of tools, and the link would stay open unless bent back in place by the use of tools, and, doing so, it would mar the links, and it would have to be refinished after they were made into a chain.

Cross-examined by HENRY BALDWIN, Esq.:

Cross Q. 80. What is a coil of tubing?

A. A piece of tubing wound on a mandrel into a coil.

Cross Q. 81. How many times must a piece of tubing be wound on a mandrel to make a coil?

A. I should say two or more.

Cross Q. 82. Did you ever, to this day, wind a piece of tubing on a mandrel, and make a coil?

A. I have.

Cross Q. 83. Did you ever make a link of a coil of that tubing?

A. I have, after eating the brass or copper out.

Cross Q. 84. What is tubing, in the sense of your patent, reissue 5774?

(Objected to as already answered.)

A. I should describe it the same as Mr. Kursh described it.

Cross Q. 85. Favor me with your own description of it?

(Same objection.)

A. It is a strip of gold drawn through a draw-plate until the edges come together, with brass or copper wire inside; then the brass or copper wire inside is there for the purpose of keeping the tubing from bending in while in the process of winding into coils.

62 Cross Q. 86. Does a brass wire, with a strip of gold closed over it, constitute tubing, in the sense of your patent 5774?

A. I don't consider the brass wire to be a part of the tubing, any more than the draw-plate would be a part of the tubing.

Cross Q. 87. Why then did you include it in your definition of tubing in your last answer but one?

A. Because I described the process of making tubing, and I mentioned the brass wire for the same reason I mentioned the draw-plate, and the mandrel in which it was wound for making coils.

Cross Q. 88. Did you ever, to this date, wind a piece of tubing on a mandrel and make a coil of it, without the inside of the tubing being filled with brass or copper wire?

A. No, sir.

Cross Q. 89. Then your coil of tubing formed on the mandrel consists of solid wire, brass or copper inside and gold outside, does it not?

A. I should not call it a solid wire.

Cross Q. 90. What would you call it, as contradistinguished from solid?

A. I should call it tubing with wire inside; in speaking of solid wire, I should mean wire that was all alike from the surface to the centre.

Cross Q. 91. Wouldn't it be correctly described, in one way, as a solid wire of brass or copper, covered with a strip of gold?

A. If it was a solid brass or copper wire covered with tubing, I should say yes; if a piece of such stock was handed to a jeweler, and you should ask him what it was, he would say it was a piece of tubing filled with brass or copper.

Cross Q. 92. Doesn't the draw-plate force the strip of gold around and into close contact with the brass or copper wire?

A. It does, but it does not weld the two metals together.

63 Cross Q. 93. Don't it make a solid of the two metals?

A. I should say not, no more than by laying this piece of wood on that piece of wood it makes them both one.

Cross Q. 94. Isn't Defendant's Exhibit G a fair sample of the tubing you have described formed on the wire?

A. It is.

Cross Q. 95. And are not your spiral links in the patent 5774 made like Defendant's Exhibit G, and cut at the proper points, according to the number of coils you wish each link to have?

A. So far as Exhibit G goes it is the same, but it is only the first stages of the process.

Cross Q. 96. Don't you sometimes have more than two coils in one of your links?

A. I do.

Cross Q. 97. Now when Exhibit G is divided into links, are those links formed of coils of tubing, as described in your patent 5774?

A. They are, but they cannot be colored until the brass wire is taken out.

Cross Q. 98. How long have you known tubing to be drawn over wire, as you have described, and used in jewelry in one form or another?

A. As long as I have known anything about the manufacture of jewelry—you might say sixteen years—I don't remember the exact date.

Cross Q. 99. You don't claim to have invented that, do you?

A. No, sir.

Cross Q. 100. How long have you known the wire to be eaten out, so as to leave the tubing hollow, after it had been shaped into the desired form?

A. Ever since I have known anything about the manufacture.

Cross Q. 101. You don't claim to have invented that, do you?

64 A. No, sir.

Cross Q. 102. How long have you known of shot being put into the ends of links formed of hollow tubing?

A. For a great many years—I couldn't say how long.

Cross Q. 103. You don't claim to have invented that, do you?

A. No, sir.

Cross Q. 104. How long have you known of links formed of hollow tubing with shotted ends, substantially such as Defendant's Exhibit C and Defendant's Exhibit I?

A. I could not say just how long, but for a number of years.

Cross Q. 105. Isn't Defendant's Exhibit C formed of coils of such tubing as you have described?

A. Yes.

Cross Q. 106. Before the links in Exhibit C were put together, wasn't each of them an open spiral link formed of coils of tubing substantially such as the link B described in the reissue 5774, except the finish?

A. The difference is that the coils of Exhibit C are spread apart or open, and the coils of the link B in the patent are closed together, not spread open, thereby making a spring link.

Cross Q. 107. Before the links of Exhibit C were spread apart, that is, after they were cut from the coil formed on the mandrel, and after the wire was eaten out, was not each of them an open spiral link formed of coils of tubing, and not spread apart, but remaining closed together?

(Objected to as irrelevant, incompetent, and as assuming what is not in evidence.)

A. You have to spread the coils in order to cut them, and from the fact that the copper or brass being inside, the coils will stay apart

65 after the copper or brass is eaten out, and therefore the coils will not be close together.

Cross Q. 108. Isn't that the case with your open spiral links B?

(Same objection.)

A. The coils of my open spiral links, B, are annealed together, and this Exhibit C is not.

Cross Q. 109. Do you have to spread the coils apart in order to cut them in making the link B, in your reissue 5774?

A. I do.

Cross Q. 110. Do you anneal them together before the wire is eaten out or afterwards?

A. Afterwards.

Cross Q. 111. This annealing them together, was it invented by you?

A. The process of annealing was not invented by me.

Cross Q. 112. Was it well understood in the trade at the time of your invention?

A. The process of annealing was well understood, but these hollow spiral spring links, formed of tubing, were invented by myself.

Cross Q. 113. Does your reissue 5774 describe this annealing together of the spiral links, as mentioned in your answer to cross question 108?

(Objected to as irrelevant and incompetent.)

A. I think there is no more mention of annealing any more than there is melting of the gold; I think there is no need of mention of annealing.

Cross Q. 114. Because it was well understood; is that what you mean?

A. Yes; the process of annealing was well understood.

Cross Q. 115. Is your link, B, a spring link when first cut from the coil on the mandrel?

66 A. No, sir.

Cross Q. 116. Is it a spring link after the wire is eaten out, and before annealing?

A. Well, it is a spring coil, but it isn't a link until it is made into a link.

Cross Q. 117. Then eating out the wire gives a spring to the coil?

A. No, sir; it allows the coil the liberty of springing; in fact, when the copper is in there, it is so tied up it cannot spring.

Cross Q. 118. Then the spring is inherent in hollow coil?

A. Yes; it is inherent in a coil of jeweler's tubing.

Cross Q. 119. Don't annealing take the spring out of the coil?

A. No, sir.

Cross Q. 120. How do you anneal the coils of your open spiral links, B, together?

A. We bind the coils together with wire, and then heat them to a cherry red, take off the wire, and the coils will remain together.

Cross Q. 121. If annealing don't take out the spring of the hollow coils, why don't they spring apart again when the wire is removed?

A. I don't know as I can explain the theory of that, but I know by experiment that they do not spring apart.

Cross Q. 122. Will not a coil of solid gold wire that is annealed retain its spring equal to that of your spiral link, B; look at the one now shown you, and see if it is of solid gold wire, and has it a spring?

A. It will not; the link shown me is of solid gold wire; I should say it has a spring, a certain amount; it is not a fair test, for the coil is very large and the wire very small.

Cross Q. 123. Has it got spring enough to make it an open spiral spring link, in the sense of your reissue 5774, aside from the hollowness?

A. No, sir; it hasn't spring enough.

67 (Defendant puts in evidence the link referred to, and also a duplicate link, the same as that, but with shot at the ends to distinguish it, Defendant's Exhibits K and L.)

Cross Q. 124. Please spring Exhibit K open without crushing the wire, say half an inch from end to end of the coil, and say whether it remains open after that test.

A. I have, and it remains open, and if it was made in proportion to my Exhibit 5—that is the size of the wire and coil—it would stay three times further open.

Cross Q. 125. Please spring Exhibit L into the round links now furnished you, to show how that spreads the link.

A. I have done so, and for the reason that the spiral is a very small wire and a very large coil, it can be sprung on and the coils will fly back in place; but if the wire and coil was in proportion to make a saleable article for a necklace it would not, and the wearer could not take apart a heavy spiral with the fingers—I mean one made of proper proportions.

Cross Q. 126. See if Exhibit M is a solid gold wire link.

A. I should say it was.

Cross Q. 127. Please anneal it and see if it retains its spring.

A. I have annealed it and its condition now shows the effect of springing it half an inch.

Cross Q. 128. In Complainants' Exhibit 1, haven't you got, and don't you generally have in your necklaces of this kind, special snap or click links for varying the length or form of the chain at the will of the wearer independent of the open spirals?

A. No, sir; the click links in Exhibit 1 are not for that purpose; the one on the end of the drop pieces is intended to connect the pendant that is intended to go with it, the other is used for the purpose of

68 holding the ends of the chain together, but there is really no need of either one of them, as the end spring links can be used for the same purpose.

Cross Q. 129. Do you in fact finish the links of your chains, such as Complainants' Exhibit 1, before they are jumped together, or do you give them a final finish afterwards?

A. We do; we do not give them any finish afterwards, and I do not remember of ever having a chain of that pattern polished in any way after being put together; if we have a chain from the office to refinish we always take the links apart, polish them, refinish them, and put them together.

Cross Q. 130. After they are put together don't you buff them, as jewelers call it, or give them some final touches?

A. We do not.

Cross Q. 131. Look at the two rings now shown you, Defendant's Exhibit N, and say if they are split rings, such as have long been known.

A. They are regular gold split rings.

(Offered in evidence, marked Defendant's Exhibit N, J. A. S., Ex'r.)

Adjourned to January 6, 1875, at 10½ a. m.

NEW YORK, *January* 6, 1875—10½ a. m.

Present, counsel as before.

Examination of Shubael Cottle continued.

Cross Q. 132. After the wire is coiled on a mandrel, if you want to make one of your links with three coils (the one in Complainant's Exhibit 1 being composed of two coils), do you spread apart any but the end coils or outer coil on each side?

A. We spread the coils either side of the one we want to cut; that leaves the outer ends of the spiral spread from the inner coils.

69 Cross Q. 133. Then if there were two coils between the two ends they would not be spread apart, one from the other, would they?

A. The two intermediate coils would not be spread apart, they would remain as wound and annealed upon the mandrel.

Redirect examination by B. F. LEE, esq.:

Redirect Q. 134. Have you examined Defendant's Exhibit M to see what it is composed of?

A. I have.

Redirect Q. 135. Is it of pure gold?

A. No, sir.

Redirect Q. 136. Is it the alloy of gold generally used in the jewelry trade for making necklaces and similar articles?

A. No, sir; I should say the quality was the same but the alloy different.

Redirect Q. 137. What do you mean by quality?

A. I mean the proportion of gold compared with the amount of alloy; for instance, this is fourteen carat gold, the same as the other exhibits are fourteen carat gold.

Redirect Q. 138. Look upon Exhibit C, and say how the link is spread out to the condition in which you now see it, so as to give each link the same spread?

A. The part of the coil that comes together is bound with wire and the ends are spread apart and annealed into that shape, so that they will be just alike.

Redirect Q. 139. Is there a saving of labor effected by finishing the links separately, as you are enabled to do in constructing chains, such as illustrated by Complainant's Exhibit No. 1?

(Objected to as incompetent.)

70 A. There is.

Redirect Q. 140. To what extent?

(Same objection.)

A. At least fifty per cent.; in one case, where the links are finished separate, we can make a perfect chain at a saleable price; in the other case it would be an imperfect chain, as the whole chain would have to be colored, and then the round or polished links would have to have the color scraped off them and polished, which would be a difficult and expensive thing to do, and would injure the color of the spiral link.

(Answer objected to.)

Redirect Q. 141. Is the labor of finishing an important item in the making of chains?

(Objected to as new matter.)

A. It is a very important item.

Redirect Q. 142. You spoke in your cross-examination of the peculiar elasticity inherent in coils of jewelers' tubing; please state which, if

any, of the defendant's exhibits constructed of tubing utilize in any manner that elasticity, exclusive of course of Defendant's Exhibit H.

(Objected to—1st. As assuming that the witness has stated there was any "peculiar" elasticity in jewelers' tubing; and, 2d, as incompetent so far as it refers to any of the exhibits not referred to in the cross-examination.)

A. Neither of them.

Redirect Q. 143. Would a chain, constructed in all respects like
71 Defendant's Exhibit L, be a good merchantable article, to be used for necklaces and other similar purposes?

A. It would not, for the reason that it is so out of proportion; and if made in proportion, that is, the size of the wire in proportion to the size of the coil, it would be so stiff that when the links were jumped together the coils of the spiral would be spread apart; and it would be difficult to take apart, without the use of tools, even with so small a wire as this Exhibit L, and for a larger wire, say the size and proportion of Complainant's Exhibit No. 2, it would be impossible to take it apart with the fingers.

Redirect Q. 144. In spreading the links of Defendant's Exhibit C, by annealing, as you have described, to a uniform spread, was this done before or after the copper was eaten out?

A. After.

Redirect Q. 145. Would it be practicable to finish the links of Exhibits C and I, separately, before they are put together?

A. It would not.

Redirect Q. 146. In your twelfth answer you say you can make as good a spring of gold as of any metal, except tempered steel; what do you refer to?

(Objected to as new matter.)

(Twelfth answer is read to the witness at his request. Witness says:)

A. I refer to the open spiral link made of coils of tubing, as described in the patent reissue 5774.

Recross-examination by Mr. BALDWIN:

Recross Q. 147. Do different jewelers use different alloys, in kind and quantity both, in making their jewelers' gold?

72 A. They do, within a certain limit; they mix their alloy in proportions to give as rich a color to their goods as possible.

Recross Q. 148. Do they all use only fourteen carat gold?

A. No, sir; jewelers that make fine jewelery use nothing less than fourteen carat; fourteen carat is the standard quality; a very little is used now of eighteen carat, and almost none of sixteen; many jewelers claim that their goods are sixteen, as the alloy is eaten out of the surface, and leaves that surface twenty-four carat; and they claim that the average of the outside twenty-four and inside fourteen would be about sixteen carat.

Recross Q. 149. Would a chain, constructed in all respects like Defendant's Exhibit L, to be used for necklaces and other similar purpose, be substantially such a chain as is described in your reissue 5774?

A. It would not, for the reason that the alloy of the spiral link is principally silver, and it is difficult, and I think impossible, to get a good color on a large surface of gold with that alloy, and if the polished link was made of the same alloy it would look too pale in color; that is, it would look as though it was as near silver as gold.

Recross Q. 150. You say it would not be practicable to finish the links

of Defendant's Exhibits C and I separately, before they are put together; why is this so?

A. For the reason that they would have to be refinished after they were put together, and the fact of the links having been colored once, they are weakened, and it is impossible to make the second color and finish as good as the first, and the first would simply be a waste of time and money.

Recross Q. 151. Why could not the links of Defendant's Exhibits C and I be finished separately, before they are put together?

A. For the reason that, as I understand the term putting together in these two exhibits, means soldered together, as if they were not
73 soldered together they would not stay in place but would shake or pull apart.

Recross Q. 152. Are not the links in those exhibits put together by jumping one link into the other, before soldering them?

A. They are, but that is only a part of the process of putting together.

Recross Q. 153. Wouldn't it be practicable then to finish them separately, and then jump one link into the other; and to that extent would it not be practicable to finish the links of those exhibits separately, whether that finish was or was not afterwards impaired by the soldering?

A. It would be a very foolish thing to do; it would be a good deal like a man putting his boots on first and his stockings afterwards.

Recross Q. 154. Then when you testify that it would not be practicable for a man to put his boots on first and his stocking afterwards, you only mean it would be foolish to do that?

A. No, I mean that he would have to take his boots off in order to get his stockings on, the same as in finishing Exhibits C and I, before soldering together that finish would be destroyed in the process of soldering.

Recross Q. 155. If the man didn't want to put his stockings on, after he put on his boots, would he need to take his boots off?

A. If he preferred cold feet he could go without stockings; if he didn't want exhibits like C and I, he needn't make them.

Recross Q. 156. If he didn't want to solder the links of C and I together, couldn't he finish those links separately, and then put them together, the same as if he was going to solder them?

A. He could jump the links together, but they would not stay in the positions they are, as shown in Exhibits C and I, without they were fastened, and he could not sell chains made of such links simply jumped together, as they would not make a durable chain.

74 Recross Q. 157. Who determines the proportions of the sizes of the coils, and of the wire composing them, in the manufacture of such jewelry as this necklace, Complainants' Exhibit No. 1?

A. The buyers.

S. COTTLE.

Subscribed and sworn to before me this 6th day of January, 1875.

JOHN A. SHIELDS,
Examiner.

The time of taking testimony herein has been extended to include this date, and proof is now closed.

Complainant's Exhibit C.—J. G., Jr., Ex'r.

The U. S. Patent Office, to all persons to whom these presents shall come, greeting:

This is to certify that the annexed is a true copy from the records of this office.

In testimony whereof, I M. D. Leggett, Commissioner of Patents, have caused the seal of the Patent Office to be hereunto affixed this thirty-first day of March, in the year of our Lord one thousand eight hundred and seventy-four, and of the Independence of the United States the ninety-eighth.

[SEAL.] M. D. LEGGETT,
Commissioner.

75 (I. 17, p. 447.)

ASSIGNMENT.

Whereas I, Shubael Cottle, of New York, county of New York, and State of New York, am about to make application for letters patent of the United States for my new and useful improvement in chain necklace, which invention is fully described in the specification pertaining to said application which I have signed under oath:

Now, this indenture witnesseth that for and in consideration of the sum of one dollar to me in hand paid, the receipt of which I acknowledge, I do hereby sell, assign, and transfer unto Mulford, Hale & Cottle, of the city, county, and State of New York, all my right, title, and interest in and to my said improvement and the letters patent therefor when granted.

The same to be held and enjoyed by the said Mulford, Hale & Cottle and assigns as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made.

And I do hereby request and authorize the Commissioner of Patents to issue said letters patent, when granted, to the said Mulford, Hale & Cottle as the sole assignees of my whole right and title therein.

Witness my hand and seal this fifth day of January, 1874.

SHUBAEL COTTLE. [L. S.]

Sealed and delivered in the presence of—

76 United States circuit court, southern district of New York. In equity.

LEWIS J. MULFORD, SETH W. HALE, SHUbael Cottle, and Samuel P. Barker,
vs.
THOS. D. PEARCE, FRANK KURSH, AND FRANK Ferrale, trading as Pearce, Kursh & Co.

Testimony taken on part of defendants, under and in pursuance to the 67th rule of the Supreme Court of the United States, as amended. In equity, under notice.

WEDNESDAY, *September 23d*, 1874.

Present, Joseph C. Fraley, esq., counsel for defendants, and Messrs. Lee and Alvord, counsel for complainants.

JOHN B. AIGUIER, being duly sworn as a witness on part of defendants, deposes and says as follows:

Q. 1. What is your name, age, residence, and occupation?

A. John B. Aiguier; I am fifty-two years of age; I reside in New York; I am a jeweler.

Q. 2. How long have you been in the jewelry business?

A. Over 37 years.

Q. 3. In whose employ did you commence?

A. I commenced with Clause & Rammey.

Q. 4. Were you in the employ of Downing & Baldwin at any time? and if so, when?

77 A. I went into their employ in 1838. Downing & Baldwin ceased to exist when Mr. Downing died in 1846.

Q. 5. Give the full names of the members of this firm.

A. John Downing and Moses G. Baldwin.

Q. 6. Did you, while in their employ, make any chains consisting of alternate open and closed links; the open links being spiral?

(Objected to as leading.)

A. I did.

Q. 7. Were these chains on sale by this firm? and if yes, where?

(Same objection.)

A. They were; in Reade st., N. Y.

Q. 8. Describe the way in which you made them.

A. We drew down square wire, and wound on a round mandrel, and then cut off into pieces as we wished them.

Q. 9. Which link did this form?

A. The round spiral link.

Q. 10. What did you do then with the links?

A. Made punchers to punch them flat.

Q. 11. The links being thus formed, what was the next stage?

A. File and finish them up and polish them.

Q. 12. How did you make the links, thus finished, into a chain?

A. By springing them into another link.

Q. 13. Can you produce, to be used as an exhibit in this case, a model which correctly represents the chain so made by you during the period you were in their employ?

A. I can, and do so.

(The chain produced by witness offered in evidence, and the same is marked Def'ts' Ex. A, J. A. S., Exr.)

Q. 14. Did you use spiral rings or links open at the ends for other purposes during the period referred to?

A. Yes, sir; I used them for guard chains, to jump into necklaces, and for other purposes.

Q. 15. Since Mr. Downing's death have you made chains consisting of spiral links? and if so, at what time?

A. I made a chain with spiral links in 1868 or 1869.

78 Q. 16. For whom did you make them? and where?

A. For M. G. Baldwin and Augustus W. Sexton; corner of Broadway and Maiden Lane, N. Y.

Q. 17. Can you produce a model of such chain?

A. I can.

(Witness produces model, and the same is marked Def'ts' Ex. B, J. A. S., Exr.)

Q. 18. In whose employ are you now, and for how long have you been so?

A. Moses G. Baldwin, Augustus W. Sexton, and Richard N. Peterson, in New York. I have been in their employ for five years, about.

Q. 19. Have you made for them any chain composed of open spiral links? and when? and if yes, produce a model of such chain.

A. I produce a model of such chain as made by us about September, 1872.

(The model referred to by witness, offered in evidence, and marked Def'ts' Ex. C, J. A. S., Exr.)

Q. 20. Where did this pattern come from?

A. From Germany.

Q. 21. Who brought it to this country? and when did he bring it?

A. Mr. Peterson brought it, in July, 1872.

Q. 22. Were these links hollow or solid?

A. They were made solid, with copper wire in the inside; then the copper is destroyed, and leaves a hollow link.

Cross-examined by B. F. LEE, Esq.:

X Q. 23. When did you last make a chain like defendants' Exhibit A, or see one made?

A. I made Exhibit A a month or two ago.

X Q. 24. When next before that did you make a chain like Exhibit A, or see one made?

A. About 1845.

X Q. 25. Have you continuously been in the jewelry business since that time?

A. Yes, sir.

79 X Q. 26. Have you since 1845 seen a chain like defendants' Exhibit A sold to any one?

A. I can't say that I have.

X Q. 27. Can you swear positively to the date at which you made defendants' Exhibit B as being before the 1st of January, 1870?

A. Yes, sir.

X Q. 28. When did you last make a chain like defendants' Exhibit B?

A. We made a piece last week to fix up one of those chains.

X Q. 29. When did you last make a whole chain like defendants' Exhibit B for sale?

A. I don't think we made one since 1870.

X Q. 30. Are you sure that you made any in 1870?

A. No; I am not sure of that.

X Q. 31. When did you first begin to make chains like defendants' Exhibit B?

A. I can't say; between 1865 and 1870; we made a good deal, I think, between those times.

X Q. 32. Will you swear you made and sold any in 1865?

A. I can't swear that.

X Q. 33. Will you swear you made and sold any in 1866?

A. No; I can't say that; I can't answer that question until I get the date of them.

X Q. 34. Will you swear you made and sold any in 1867?

A. That I can't say until I get the date of them.

X Q. 35. Can you swear you made and sold any in 1869?

A. No; I can't say that any were sold in 1869.

X Q. 36. You didn't consider defendants' Exhibit B a very successful style of chain, did you?

(Objected to as irrelevant and not cross-examination.)

A. No; I did not.

X Q. 37. Are you willing to swear that defendants' Exhibit C, as it now stands, is composed of open spiral links not fastened together by solder or otherwise?

A. No, sir.

X Q. 38. After Mr. Peterson brought the model of defendants'
80 Exhibit C to this country, how soon did you commence to manufacture and sell such chains, giving the date of the first sale?

A. I can't give the date of the first sale. I think we commenced to make them in September, 1872.

X Q. 39. How soon after that were they put on the market?

A. I can't say when they were put on the market. I can't give the dates.

X Q. 40. Are you at all sure of any of the dates which you have given in reference to this Exhibit C?

A. Not sure; not positive; but I have the impression that it was September.

Redirect:

Q. 41. Do the fashions of chains change from time to time?

A. They do.

Q. 42. Have you ever known a fashion gone out to be revived again?

A. I have.

Q. 43. Were chains like Exhibit A in fashion about 1845?

A. Yes, sir.

Q. 44. In what capacity are you and have you been employed under the parties mentioned by you?

A. Foreman of the chain department.

Q. 45. Have you anything to do with the selling department?

A. No; I don't sell anything.

Q. 46. Were chains like Exhibit B in fashion between 1865 and 1868?

A. Yes, sir.

Q. 47. Though you cannot give the date without reference when any specified piece of chain, like Exhibit B, was made by you before 1868, are you sure whether you made any before that year?

A. Not any in gold; but I have made them in brass.

Q. 48. Did you make the chains like Exhibit C for the fall trade of 1872?

A. I think we did.

Q. 49. In what month is the fall trade considered to commence?

(Objected to as incompetent and leading.)

81 A. About October.

Q. 50. Are you positive that you commenced chains like Exhibit C before October, 1872?

A. I can't say. I have an impression that we commenced in September.

Q. 51. Before the links, of which Exhibit C is made, are put together, are they open or closed?

A. Open.

Q. 52. Can you produce such a link?

A. I can.

(Witness produces a link, and the same is marked Def'ts' Ex. D, J. A. S., Exr.)

Q. 53. How are the links put together?

A. One is sprung into the other.

Q. 54. Does this make a chain?
A. It does.
Q. 55. Are the links finished separately before being put together?
A. No; they are colored after they are put together.
Q. 56. Do you recollect in what month Mr. Peterson returned from Europe with this chain?
A. I think it was in July.
Q. 57. Did you see the original chain as soon as it came over?
A. I did.

Recross:

X Q. 58. For what purpose did you make the brass chain referred to in your answer to question 47?
A. For my own instruction and amusement.
X Q. 59. They were not made for use or sale?
A. No, sir.
X Q. 60. Will you swear that a chain like defendants' Exhibit C would make a practically useful chain if the links were not soldered together as they appear in that exhibit?
(Objected to as irrelevant.)
A. No; I don't think it would.

JOHN B. AIGUIER.

Subscribed and sworn to before me this 23d day of September, 1874.

82 RICHARD N. PETERSON, being duly sworn as a witness on part of defendants, deposes and says as follows:

Q. 1. What is your name, age, residence, and occupation?
A. Richard N. Peterson; I am 44 years of age; residence, New York City; I am a jeweler.
Q. 2. With whom are you in partnership, and since when?
A. Moses G. Baldwin and Augustus W. Sexton; since 1854.
Q. 3. How long have you been in the jewelry business?
A. Since 1846.
(Defendants' Exhibit A shown to witness.)
Q. 4. Have you ever seen chains made like the exhibit?
A. I have.
Q. 5. How long ago do you remember to have seen them?
A. I made them when I was an apprentice; I made them in 1848 and '50, and saw them for years afterwards—I can't say how long.
Q. 6. Were chains of that construction—that is to say, with alternate open and closed links, the open links being spiral—commonly known in the trade as early as 1850?
(Objected to as leading.)
A. They were.
(Defendants' Exhibit B shown to witness.)
Q. 7. Have you ever seen chains like Exhibit B; and, if so, how long ago did you first see them?
A. This particular pattern of chain we sold as long ago as 1865.
Q. 8. Whereabouts did you sell them?
A. In our office in New York.
Q. 9. Was it in New York that you made and saw chains like Exhibit A?
A. Yes.
(Exhibit C shown to witness.)
Q. 10. When did you first see a chain like Exhibit C?
A. I first saw it in the early part of 1872.

Q. 11. Where?

A. I saw it worn and for sale in the stores; I can't tell whether it was in New York or where.

Q. 12. Did you purchase a chain like Exhibit C in 1872; and, if so, where?

83 A. I purchased such a chain in Germany.

Q. 13. What did you do with it?

A. I had it shipped to New York.

Q. 14. In what month was that?

A. Shipped from Paris on the 4th of July to our house in New York.

Q. 15. Before you went to Europe in 1872, did you see any chain like the exhibit?

A. I did.

Q. 16. In what month did you go to Europe?

A. The last of May.

Q. 17. Did your firm manufacture any chains from the pattern so sent by you?

A. They did.

Q. 18. When did you commence to manufacture them, and where?

A. We commenced immediately on my return, in the latter part of July, in New York.

Q. 19. Did you put them upon the market at once?

A. I did.

Cross-examined by B. F. LEE, Esq.:

X Q. 20. Did you sell any chain like Exhibit A as late as 1850?

A. Yes, sir.

X Q. 21. When did you last sell or see sold a chain constructed exactly like Exhibit A?

A. I can't fix the time positively; it has run through most of my business experience.

X Q. 22. Can you say positively that you sold or saw sold any since 1860?

A. I cannot positively fix it to that date.

X Q. 23. Can you say positively that you sold or saw sold any since 1855?

A. Yes.

X Q. 24. How many such chains have you known to be manufactured since 1855?

A. It is impossible to tell.

84 X Q. 25. Will the number exceed ten, or twenty, or thirty?

A. It would ten, and naturally would exceed twenty or thirty, as the thing was regularly selling.

X Q. 26. Can you say positively that you ever made or sold fifty of such chains, exactly like Exhibit A?

A. Yes.

X Q. 27. When did you discontinue the manufacture of these chains, Exhibit A?

A. It is impossible to fix the time. I will not fix any time, because it is impossible to do so.

X Q. 28. It was certainly before 1860, was it not?

A. I should say not. My impression is that we ran it later than that time.

X Q. 29. You certainly discontinued it before 1865, did you not?

A. I shouldn't say we discontinued it now.

X Q. 30. What is the latest year in or after which you can positively say that you have made and sold a chain like Exhibit A?

A. I cannot state positively any year. I can safely say in and after 1855.

X Q. 31. What is the latest year in or about which you can positively say that you have made and sold a chain like Exhibit A?

A. I shall answer that question just as I say; I cannot fix the time that I sold them last.

X Q. 32. Answer cross 31 as near as you can.

A. I have no means of forming a judgment as to how late.

X Q. 33. Are you sure that the date given in your answer to question 7 should not be "in or after 1867"?

(Objected to as incompetent.)

A. This chain was certainly sold by us as early as 1865.

Q. 34. Now, will you swear positively that the chains which you have spoken of as being like Exhibit B, sold by your firm, did not have the spiral links fastened or closed in any way, by solder or otherwise?

A. The earlier chains made were not soldered, but we found a tendency to pull out, and we afterwards soldered them.

85 X Q. 35. Were you usually in the factory during 1865, or in the office?

A. Mainly in the office; more or less in the factory.

X Q. 36. How long did you continue to make them without being soldered—was it beyond 1865?

A. We made them until we discovered their weakness by customers sending them back to us, and after that we soldered them.

X Q. 37. How many chains like Exhibit C did you see prior to sailing for Europe in the last of May, 1872? Where were they? Who had them? And what examination did you give to such chains?

A. I remember seeing one worn and one or more in stocks in stores, but cannot say where or who had them; but recognized the pattern immediately on seeing it in Germany as similar to one I had seen in this country. I gave it no examination in this country further than looking at it in passing.

X Q. 38. Then can you swear positively that the chains seen by you before sailing for Europe were constructed precisely like Exhibit C?

A. I can.

X Q. 39. Your firm are engaged in infringing the letters patent on which this suit is brought, are they not?

(Objected to, unless a copy of said letters patent are shown to witness, and further, as incompetent, and not proper cross-examination.)

A. I imagine I know what he claims as his patent, and, if my impression is correct, we have made the chains.

Redirect:

Q. 40. You have said that the spirals of which Exhibit B is composed would open unless they were soldered. Do you know of any form of unsoldered spiral links which is not liable to this objection?

A. Yes, I do; those like Exhibit A.

Q. 41. If the ends of the spirals are left projecting, will they not open?

A. They are liable to open.

86 Q. 42. Will the form of link which you believe to be covered by the claim of the patent now in litigation open when in use?

(Objected to as incompetent and indefinite.)

A. They are liable, and we have had them do so.

R. N. PETERSON.

Subscribed and sworn to before me this 23d day of September, 1874.

Adjourned to 24th inst., at 11 a. m.

THURSDAY, *September 24th*, 1874.

Present, counsel as before.

JOSEPH F. CHATELLIER, being called and sworn as a witness on part of defendants, deposes and says as follows:

Q. 1. What is your name, age, residence, and occupation?

A. Joseph F. Chatellier. I am 47 years of age. I reside in New York City. I am a jeweler.

Q. 2. How long have you been in the jewelry business?

A. Since 1843.

Q. 3. Are you in partnership with any one? and, if so, give his name, and state how long you have been so.

A. I am, with William Spence, since 1847.

Q. 4. Have you ever seen a chain composed of alternate open and closed links, the open links being spiral?

A. Yes, sir.

Q. 5. When and where do you recollect to have first seen such chain?

A. I couldn't tell positively where I first saw one, or when; but I certainly have seen them twenty years. The first I remember of ever having seen such a thing was in a fob-chain.

(Exibit A shown witness.)

Q. 6. Have you ever seen a chain like Exhibit A? If so, when can you state that you have seen it?

87 A. I have seen chains like this exhibit—plenty of them; but I couldn't fix any date. I will simply say that the first that I saw one like this was a great while ago.

Q. 7. Was it before the commencement of the war?

A. Yes, sir.

Q. 8. Did you see them in New York?

A. Yes, sir.

(Exhibit B shown to witness.)

Q. 9. Has your firm ever sold chains like Exhibit B?

A. Yes, sir.

Q. 10. When and where?

A. In this city, within five years.

Q. 11. Was it as long ago as five years?

A. The first one was; the last was about two years.

Q. 12. Have you any in stock now?

A. Yes, sir.

Q. 13. Have such chains been commonly known in the trade; and, if so, how long do you recollect them to be so?

A. I think about five or six years.

Q. 14. Do you know of any other style of chain having the same general construction?

A. Yes.

Q. 15. Have you in your possession such a chain?

A. I have.

(Witness produces a piece of chain, and the same is marked Def'ts' Ex. E, J. A. S., Ex'r.)

Q. 16. To whom did the chain, of which that is a piece, belong?

A. It belonged to William Aikens, of New Jersey, who is now dead.

Q. 17. How long ago did he die?

A. To the best of my recollection, about fifteen years. I couldn't give the exact date now.

Q. 18. Did you ever see him wear it in New York?

A. I couldn't swear that I did. He wore that generally as a watch-chain.

Q. 19. Have you ever worn it; and when and where?

A. I have worn it as a watch-chain within fifteen years, in New York.

88 Cross-examined by B. F. LEE, Esq.:

X Q. 20. The chains referred to in your 4th and 5th answers were similar to Exhibit A, were they not?

A. Yes, sir.

X Q. 21. When did you last ever know of a chain like Exhibit A being sold?

A. I never knew of one being sold.

X Q. 22. You have been in the jewelry business continuously since 1847?

A. Yes, sir.

X Q. 23. Where, and in whose possession, did you see the chains like Exhibit A, that you have testified about?

A. I have seen them in the stores, and I have seen them worn, but the names of the parties I couldn't tell. It, to me, is a very common pattern.

X Q. 24. Can you not specify one single store in which you have seen such chains on sale?

A. No, sir.

X Q. 25. Can you not specify the name of one single person that wore a chain like Exhibit A?

A. No, sir.

X Q. 26. Are you willing to swear that chains like Exhibit A, that you think you have seen, had not the split link fastened together by solder or otherwise?

A. I will swear positively that they hadn't.

X Q. 27. Name the place where, and the time when, you ever made any examination of such a chain, so as to enable you to testify as you have in your last answer.

A. Oh, I couldn't. In such ordinary thing as that I couldn't remember dates or places at present.

X Q. 28. Do you remember at all making any such examination as spoken of in the last question?

A. I think it would be unnecessary to make any such examination, as it would show at first sight to a jeweler. Such an ordinary split ring is older than my grandmother.

X Q. 29. When did you first sell a chain like Exhibit B?

A. I should say five or six years ago.

X Q. 30. Who made them?

89 A. We made them ourselves.

X Q. 31. When did you last make one?

A. I think we haven't made one in five years.

X Q. 32. And those referred to in your 12th answer are some of the old stock still on hand?

A. We have now on hand some of that same chain in bulk, two or three yards long. I may have a half a dozen pieces. I saw one piece this morning. It is part of the old lot.

X Q. 33. The chains made by you like Exhibit B had the links soldered or otherwise closed, did they not?

(Objected to, as Exhibit B is not soldered or closed.)

A. The two ends of each link are turned in so as to be concealed, and the spirals are then soldered together in pairs, thus permanently fastened, so that they can't be taken apart.

X Q. 34. Did you ever see a finished chain made, so as to be exactly like Exhibit B when finished? Look at Exhibit B as it now exists, and answer the question.

A. I don't know what Exhibit B will look like when finished.

X Q. 35. Then you consider Exhibit B as a chain unfinished, or in process of construction?

A. Yes, sir.

X Q. 36. How many chains like Exhibit E have you ever seen sold?

A. I never saw any sold.

X Q. 37. How many have you ever seen used?

A. One.

X Q. 38. How long did you wear the chain, of which Exhibit E is a piece, as a watch-chain?

A. I may have worn it a year. I handed it over to a brother of mine, and he wore it for some time.

X Q. 39. When was that chain last in use?

A. I don't think it has been worn in five years. I think, probably, it was last worn about six years ago.

X Q. 40. How many chains like Exhibit E have you ever known to be made?

A. I have never seen any made or known them to be made.

X Q. 41. How long did you know Mr. William Aikens to wear that chain?

90 A. I couldn't say.

X Q. 42. How did it come into your possession?

A. He left it to me at his death. He was my uncle.

X Q. 43. You have made chains, have you not, of the same construction as those complained of in this suit since the granting of the reissued patent on which this suit is brought, February 27th, 1874?

(Objected to, unless a copy of said letters patent is shown to witness, as irrelevant and not cross-examination.)

A. I couldn't tell without referring to my books, but I don't think I have. I have made some, and I have been trying to sell them since that time.

Redirect:

Q. 44. Were you familiar with the fashions in chains twenty years ago?

A. Not specially.

Q. 45. Can you say from your knowledge as a jeweler whether chains like Exhibit A were in fashion at or about that time?

(Objected to as incompetent.)

A. Yes, sir; I think they were very much worn as watch-chains.

Q. 46. Are the links of Exhibit B, as it now stands, soldered or closed?

A. They are not soldered.

Q. 47. When you said that the chains made by your firm, like Exhibit B, had the ends turned in and the links or spirals soldered together in pairs, did you not mean that after a chain had been made exactly like the exhibit it was finished in the way you have described?

A. That is exactly what I did mean.

Q. 48. Then your use of the word "finished" referred, did it not, to what was done to the chain, like Exhibit B, after it was a complete chain?

A. After it had arrived in construction to the state of Exhibit B.

Q. 49. Is or is not Exhibit B, as it now stands, a chain?

91 A. Yes.

Q. 50. Is Exhibit E a finished chain?

A. It is.

Q. 51. State what differences, other than the metal and the compactness with which the links are united, you can point out between them.

A. There is no difference in the construction.

Q. 52. What does a jeweler mean by the word "finished"?

A. It depends altogether on the construction of the article and style it is to be finished after. I don't know as I can say any better than that.

Q. 53. If Exhibit B had its links colored or polished, and then put together as it now stands, would it not be a finished chain?

(Objected to as leading.)

A. Yes, sir.

Q. 54. Before the chain, which you have now in stock, and which you describe as being like Exhibit B, had its ends soldered together in the manner described, it would hold together as a chain, would it not?

(Objected to as leading.)

A. Yes, sir.

Q. 55. Then, if any one had wished a chain of that pattern, it would have been suitable to wear, would it not?

A. Why, certainly, if they wished it.

Q. 56. Then, by the word "finished," do you mean the style or pattern which could be given to the chain after it was complete as a chain merely?

A. I do.

Recross:

X Q. 57. Will you please explain to the court why, if you think that the chains made like Exhibit B by you, the links of which you say were all soldered as described, would have been good, properly constructed chains, suitable to offer on the market, with the soldering process omitted, you took the trouble to solder them?

(Objected to as incompetent.)

92 A. I will say this: the chain of that style made by us is of a very much smaller pattern, using much thinner wire, and is more soldered for the purpose of hiding the ends of the spirals, and also to keep them from worming themselves out, than from any additional strength given to the chain. In a larger chain, same as Exhibit B, it would be entirely unnecessary, except for the purpose of hiding the rough ends of the spirals, which might be finished by soldering a grain on the ends of said spirals, which is positively nothing new, for I have made chains finished in that way.

X Q. 58. Please describe exactly and minutely how a split ring, like a link in Exhibit E, is made.

A. I don't know what the process now is of making them; the old-fashioned way, I think, was to strike the coil or spiral in a die with a punch or press.

X Q. 59. Are the links in Exhibit B made in the way you have spoken of, namely, striking the coil or spiral in a die with a punch or press?

A. No, sir; they are not struck in a die with a punch or press.

X Q. 60. The circular links in chains like Exhibit A are made in the manner described in your answer to cross-question 58, are they not?

A. Yes, sir.

X Q. 61. You speak in your 58th answer of the "old fashioned way"; do you know or have you heard of any new process?

A. No, sir.

Direct resumed:

Q. 62. Are the ends of the spiral links—defendants' Exhibit D—finished with a grain?

A. They are.

Q. 63. Have you ever made or sold a chain whose links were finished in that manner; and, if so, when and where?

(Objected to as irrelevant and indefinite, and already asked and answered.)

93 A. I have; in New York; within from eighteen months and two years. I think it was last winter and the winter before last.

Q. 64. Was it before you had seen complainants' patented chain?

A. Yes, sir.

Q. 65. When did you first see complainants' patented chain?

A. Do you mean one of their chains or do you mean the pattern?

Q. 66. I mean a chain of that pattern made by anybody.

A. I saw the pattern of that chain in brass or copper before I ever knew anybody was making it, and decided not to make it because, being connected by a spiral of only one coil and made of hollow wire, we didn't deem it sufficiently strong. When I saw this it was either a year or year and a half ago; but I am not positive; it may not be over a year.

Q. 67. Who had that pattern?

A. I. The piece I am positive about belonged to our factory.

Q. 68. Was it made in your factory?

A. Yes, sir.

Q. 69. Can you not ascertain the date?

A. No, sir.

Q. 70. Can you not say whether it was in 1873?

A. I am pretty positive it was in 1873. I feel more positive about its being in 1873 than that it was before 1873.

Q. 71. Was it before chains of that pattern were put into the market by the complainants?

A. It was before I knew them to have any in the market.

Q. 72. Do you have business transactions with the complainants?

A. Yes, sir.

Q. 73. Do you keep yourself acquainted with the styles of goods put into the market by your competitors?

A. I do.

Q. 74. Are the complainants competitors of yours?

A. Yes, sir.

JOS. F. CHATELLIER.

Subscribed and sworn to before me this 24th day of September, 1874.

Adjourned to 25th inst., at 11 a. m.

94 WEDNESDAY, *September 30th*, 1874.

Met pursuant to agreement.

Present, counsel as before.

THOMAS D. PEARCE, being duly sworn as a witness on part of defendants, deposes and says:

Q. 1. What is your name, age, residence, and occupation?

A. Thomas D. Pearce; I am 40 years of age; I reside in Philadelphia, Pa.; I am a jeweler.

Q. 2. How long have you been in the jewelry business?

A. Twenty years.

Q. 3. Were you ever in the employ of Hildeburn & Bro., in Philadelphia?

A. Yes, sir; Joseph Hildeburn and Henry M. Hildeburn.

Q. 4. When did you leave their employ?

A. I think it was in 1858.

Q. 5. Was it before 1860?

A. Yes.

Q. 6. Did you ever, while in their employ, sell for them split rings?

A. Yes.

Q. 7. In large or small quantities?

A. I used to sell them a dozen at a time; sometimes less, according to what a man wanted.

Q. 8. What is a split ring?

(Exhibit A shown to witness.)

A. The round ring in Exhibit A is a split ring.

Q. 9. Did you ever sell for them, while in their employ, chains composed of alternate open and closed links, the open links being spiral?

(Objected to as leading.)

A. Yes.

Q. 10. Were any of these chains like Exhibit A in construction?

A. Yes.

Cross-examined by B. F. LEE, Esq.:

X Q. 11. The chains referred to in your 9th answer were composed of closed links alternating with split rings, were they not?

95 A. It was this sort of a chain, like Exhibit A.

X Q. 12. How many chains like Exhibit A did you sell in or before 1860?

A. I might have sold a hundred, or I might have sold fifty or twenty; I don't know how many I sold.

X Q. 13. Can you state positively that you sold over ten?

A. No, I can't; it is a long time ago.

X Q. 14. Can you state positively that you sold five?

A. Yes, I can.

X Q. 15. How many chains like Exhibit A have you sold since 1860?

A. I haven't sold any.

X Q. 16. Do you know of your own knowledge that the chains like Exhibit A sold by you prior to 1860 were successful and satisfactory articles in the hands of the purchasers?

(Objected to as irrelevant and incompetent.)

A. Yes, I do; I consider them very successful.

X Q. 17. Have you been continuously in the jewelry business for the last twenty years?

A. Yes, with the exception of about two years, when I was exclusively in the watch business. I think from 1858 to 1860 I was in the watch business.

Redirect:

Q. 18. Have you ever known the fashions in jewelry to change?

A. Yes.

Q. 19. Have you ever known an old fashion to revive?

Recross:

X Q. 20. You are one of the defendants in this cause?

A. Yes, sir.

THOMAS D. PEARCE.

Subscribed and sworn to before me this 30th day of September, 1874.

FRANK KURSH, being called and sworn as a witness on part of defendants, deposes and says:

96 Q. 1. What is your name, age, residence, and occupation?

A. Frank Kursh; I am 34 years of age; I reside in Philadelphia; I am a jeweler.

Q. 2. How long have you been in the jewelry business?

A. Eighteen years this month.

Q. 3. Are you one of the defendants in this suit?

A. Yes, sir.

Q. 4. How long have you been in the jewelry business in Philadelphia?

A. Eighteen years.

Q. 5. What part of the business do you have charge of?

A. Manufacturing.

Q. 6. How long have you known of the use of hollow tubing in jewelry?

A. As long as I have been engaged in the jewelry business.

Q. 7. How long have you known of the use of chains for necklaces?

A. As far back as I can remember.

Q. 8. Can you produce, to be used as exhibit in this cause, a tubular spiral?

A. I can.

(Witness produces a tubular spiral, and the same is marked Def'ts' Ex. F, J. A. S., Ex'r.)

Q. 9. What is Exhibit F a model of?

A. It is a model of earrings, pins, and chatelain pins, with the exception that the holes seen in the ends are closed up.

Q. 10. Did you ever make earrings, pins, and chatelain pins like the exhibit; and, if so, when and where?

A. I have made them in Philadelphia, from 1857 to 1860.

Q. 11. Describe how the spiral, which forms part of the exhibit, was made.

A. A piece of gold plate is drawn through a draw-plate until the seam is nearly closed, with a copper wire inside of it; it is then drawn through series of graduated holes until the gold and the copper unite together so as to make a solid wire; it is then mandreled into a spiral; it is then put into nitric acid to eat the copper out so as to leave a hollow spiral; it is then either colored or polished.

97 Q. 12. What is a draw-plate?

A. It is a piece of steel with series of graduated holes.

Q. 13. Does the drawing through these holes curl the pieces of gold plate into a tube?

A. It does by the assistance of a small piece of wire.

Q. 14. In your experience as a manufacturing jeweler, have you ever known of any other way in which a spiral can be made hollow?

A. I do not.
Q. 15. Can you bend a hollow tube into a spiral?
A. No, sir; not perfectly.
Q. 16. What will result if you bend a hollow tube around a mandrel?
A. It will not keep its shape; the seam will open, and the hollow wire will become mashed.
Q. 17. Look at the piece now shown you, marked Defendants' Exhibit G, and state whether it correctly represents a spiral, formed as you have described in your answer to question 11, before it is made hollow.
A. It does.
Q. 18. When did you first use the fluted wire of which Exhibit G is made, and for what purpose?
A. In 1869; for necklaces.
Q. 19. How did you make the links for those necklaces?
A. The same way as I described in my answer to question 11.
Q. 20. Were the links of these chains spirals?
A. It was a continuous spiral, cut into rings, double rings, or treble rings, which formed the spirals.
Q. 21. Were the single rings spiral?
A. No, sir.
Q. 22. How did they form a link?
A. By springing it into another link.
Q. 23. Did the two ends of the single ring meet each other?
A. They did.
Q. 24. Were the links of these necklaces polished and finished before they were sprung together?
A. No, sir.
98 Q. 25. You have described the links which were formed of a single ring; what were the other kind of links in the chain?
A. I did not use any other link in that particular pattern. The links were all alike; single rings.
Q. 26. Have you ever made a chain consisting of such single rings alternating with and sprung into tubular spiral links?
A. I have.
Q. 27. When and where did you first make such a chain?
A. In Philadelphia, September 24th, 1873.
Q. 28. Did you make more than one at that time?
A. We made a dozen or more at that time.
Q. 29. What did you do with the first one you made?
A. Sold it to Campfield Bro. & Co., Baltimore.
Q. 30. Did you sell the others which you made?
A. Yes, sir.
Q. 31. Were the links of that chain finished separately before they were sprung together?
A. Partly finished.
Q. 32. What was done to them after they were sprung together?
A. They were then finished.
Q. 33. How?
A. By rouge and cotton buff wheel.
Q. 34. What did this do to them?
A. It finished the plain link to a higher polish.
Q. 35. Do you know what a serpentine bracelet is? If so, describe it.
A. What do you call serpentine?
Q. 36. A bracelet made of a coil to spring over the wrists.
A. We call them serpents.

Q. 37. Have you ever made any?
A. I have.
Q. 38. How long ago?
A. In 1871; in Philadelphia.
Q. 39. Were they tubular?
A. Yes, sir.
Q. 40. Were they made by a process similar to the one which you have already described for making a spiral link?
A. Yes, sir.

99 Cross-examined by B. F. LEE, esq.:

X Q. 41. The serpent bracelets of which you have spoken were hinged, were they not?
A. No, sir.
X Q. 42. Describe exactly how they were made so that they would expand or open so as to allow the passage of a hand through them, or allow the wrist to be placed in them.
A. The bracelet I speak of, of a spiral tubing, slipped over the hand, to be worn on the thick part of the arm.
X Q. 43. How many such did you make?
A. One, as near as I can remember; one I'm sure of.
X Q. 44. Was that composed of continuous tubing?
A. It was a spiral link, double on one side, the two ends showing on the other.
X Q. 45. You have spoken of certain chains made by you for necklaces, beginning September 24th, 1873, composed of alternate ring links and hollow spiral links; were the spiral links in the first chain of that description made by you fastened or closed by solder or otherwise?
A. They were a spiral ring sprung into a plain ring; the plain ring being applied to the spirals of my own idea. The spiral ring was permanently left open.
X Q. 46. You know the chain that is complained of as an infringement in this suit, consisting of a plain hollow circular ring polished, alternating with a spiral, corrugated link, presenting to the eye the precise appearance of the drawing attached to the letters patent, Complainants' Exhibit B?
A. I do.
X Q. 47. Was the chain made by you September 24th, 1873, precisely like that in all respects?
A. It was.
X Q. 48. Will you swear that you never saw that precise pattern of chain before you made it?
A. Yes, sir.
X Q. 49. Did anybody connected with your firm suggest to you the making of such a chain?
A. No, sir; neither employee nor anybody else.
X Q. 50. Then you are willing to swear that the pattern of
100 chain shown in the drawing attached to Complainants' Exhibit B was your own independent invention?
A. Yes, sir.
X Q. 51. How were the links spoken of in your 20th answer closed together, so as to form rings single, double, or treble?
(Objected to, as the witness has not stated that any but the single rings were closed together.)
A. Every other ring was soldered together, partly finished, and then

sprung, with the intermediate link, together, and closed by soldering the ends of the intermediate link together.

X Q. 52. This made, of course, a continuous closed chain?

A. Yes, sir.

X Q. 53. The single rings spoken of in your 25th answer were closed by solder, were they not?

A. Yes, sir.

Redirect:

Q. 54. Can you produce, to be used as an exhibit in this case, a piece of chain of the same pattern and construction as the chain which you made September 24th, 1873?

A. Yes, sir; here it is.

(Chain produced by witness offered in evidence, and marked Def'ts' Ex. H, J. A. S., Ex'r.)

Q. 55. When you said we sold that chain, who did you mean?

A. Pearce, Kursh & Co.

Q. 56. In your description of the process of making the tubular spiral, you stated that after the wire was mandreled into a spiral the copper was eaten out by acids. Was this done before the spiral was cut into lengths such as you wished to use?

A. It was done after it was cut into lengths.

Q. 57. Did your firm sell the serpent bracelet which you made in 1871?

A. Yes, sir.

Q. 58. What did you mean in your description of that bracelet when you said it was a spiral link double on one side, the two ends showing on the other?

101 A. It presented the same appearance as the spiral ring we made September 24th, 1873, and showing one ring and two ends on one side, and a double ring on the other.

Recross:

X Q. 59. For whom was that serpent bracelet made?

A. It was made for Tiffany & Co., at that time, 1871, as near as I can remember.

X Q. 60. How thick was the tubing? Give its diameter.

A. Diameter was a quarter of an inch, as near as I can remember.

X Q. 61. Was it circular tubing?

A. It was a circular tubing.

X Q. 62. And it consisted of nothing but tubing, without spring or hinge or other device?

A. Yes, sir.

X Q. 63. Do you know for whose wear it was made, or to whom it was sold to be used?

A. No, sir.

X Q. 64. How much would it expand and contract in diameter across the bracelet, in either the long or short direction?

A. I did not try it, therefore I can't tell how much.

FRANK KURSH.

Subscribed and sworn to before me this 30th day of September, 1874.

JOSEPH F. CHATELLIER, being recalled, deposes and says:

Q. 1. You have already been sworn and examined as a witness in this cause?

A. I have.

Q. 2. Did your firm make and sell any chains for necklaces composed of coils or coiled links of hollow tubing; and, if yes, when?

A. They did; and were offered for sale August 22d, 1871.

Q. 3. Can you produce a pattern representing those chains?

A. I can, and do so.

(Witness produces a pattern, and the same is marked Def'ts' Ex. I, J. A. S., Ex'r.)

102 Q. 4. That exhibit is solid, is it not?

A. Yes, sir; we never make patterns hollow.

Q. 5. When were they sold, and to what extent?

A. I can only tell that by referring to my books.

Q. 6. Were they on sale at your place of business in New York?

A. They were.

Cross-examined:

X Q. 7. How can you fix, positively, the date at which you first manufactured Defendant's Exhibit I in New York?

A. From my register.

X Q. 8. Then you can swear positively that on August 22d, 1871, you had completed chains like Exhibit I, and had them ready for sale?

A. I can.

JOSEPH F. CHATELLIER.

Subscribed and sworn to before me this 30th day of September, 1874.

To save trouble and expense of formal proof, counsel for complainants admits that chains have been made, prior to complainants' invention, of tortoise shell precisely like Exhibit J, J. A. S., Ex'r, and used for necklaces, watch-chains, and other ornaments; and the same admission as to chains made of vulcanite, as exemplified in Exhibit J', J. A. S., Ex'r.

STATE OF PENNSYLVANIA,
City and County of Philadelphia, ss:

ISAAC DIXON, having beeen duly affirmed, deposes and says:

I am fifty-six years of age, and reside at said city of Philadelphia; I have been for the past forty-one years, and am now, engaged in the jewelry business in said city, and am familiar with ornamental chains of tortoise-shell and vulcanite, having dealt therein for ten years past. During the whole of that period, chains, necklaces, and watch-chains
103 of tortoise-shell and vulcanite, consisting of alternate closed links and open links sprung together and without any fastening for the open links, have been well known to me as a common article of manufacture, and I have for that length of time sold them at the said city of Philadelphia. The same are and always have been, during my said knowledge of them, made by finishing each link separately and then springing them together. I have examined two chains, the one of tortoise-shell and marked Def'ts' Ex. J, J. A. S., Ex'r, and the other of vulcanite, and marked Def'ts' Ex. J', J. A. S., Ex'r; and find the same to be of the construction above described, consisting of open links and closed links, which have been separately finished and then sprung together, and such as I have sold for the last ten years as above stated. And further saith not.

ISAAC DIXON.

Affirmed to and subscribed before me this 3d day of October, A. D. 1874.

CHARLES S. POTTER,
Notary Public.

United States circuit court, southern district of New York. In equity.

MULFORD HALE ET ALS.
vs.
PEARCE KURSH ET AL.

It is hereby agreed that the affidavit of Isaac Dixon, hereto annexed, shall be filed in above suit as a part of the testimony for defendants, and that it may be read and used at the hearing thereof the same and with the same effect as if it had been regularly taken before the examiner duly appointed to take testimony therein. And the counsel for complainants hereby waive cross-examination of the said Dixon.

LEE & ALVORD,
Complainants' Solicitors.
HENRY BALDWIN, JR.

OCTOBER 3D, 1874.
JOSEPH C. FRALEY,
Solicitor for Defendants.

104 *Compl't's Exhibit A.—J. G., Jr., Ex'r.*

65.

(Engraving of an eagle.)

The U. S. Patent Office to all persons to whom these presents shall come, greeting:

This is to certify that the annexed is a true copy from the records of this office of the letters patent granted Mulford, Hale & Cottle, dated Feb'y 3, 1874, No. 147045, for "imp't in chains for necklaces, &c."

In testimony whereof I, J. M. Thacher, Acting Commissioner of Patents, have caused the seal of the Patent Office to be hereunto affixed, this 24th day of July, in the year of our Lord 1874, and of the Independence of the United States the ninety-ninth.

[L. S.]

J. M. THACHER,
Acting Commissioner.

No. 147045.

(Engraving of Patent Office.)

The United States of America to all to whom these presents shall come:

Whereas Shubael Cottle, of New York, New York, has presented to the Commissioner of Patents a petition praying for the grant of letters patent for an alleged new and useful improvement in chains for necklaces, &c., he having assigned his right, title, and interest in said improvement to Mulford, Hale & Cottle, of same place, a description of which invention is contained in the specification of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such cases made and provided; and whereas, upon due examination made, the said claimant is adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said Mulford, Hale & Cottle, their heirs or assigns, for the term of seventeen years from the 3d day of February, one thousand eight hundred and

seventy-four, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the city of Washington the third day of February, in the year of our Lord one thousand eight hundred and seventy-four, and of the Independence of the United States of America the ninety-eighth.

[L. S.]

B. R. COWEN,
Acting Secretary of the Interior.

Countersigned:
M. D. LEGGETT,
Commissioner of Patents.

105 S. Cottle. Chains for necklaces, &c. No. 147045. Patented Feb. 3, 1874.

Fig. 1.

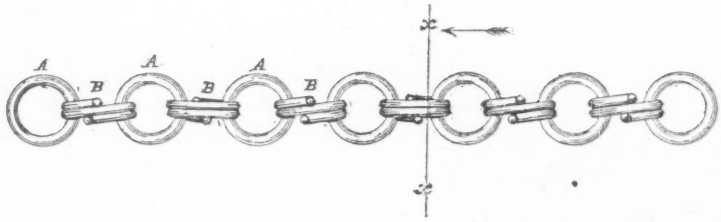


Fig. 2.

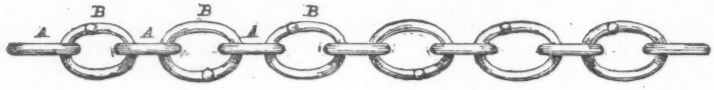
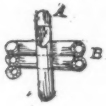


Fig. 3.



S. COTTLE,
Inventor,
Per MUNN & CO.,
Attorneys.

Witnesses:
A. W. ALMGOIST.
C. SEDGWICK.

106 UNITED STATES PATENT OFFICE.

Shubael Cottle, of New York, N. Y., assignor to Mulford, Hale & Cottle, of same place. Improvement in chains for necklaces, &c.

Specification forming part of letters patent No. 147045, dated February 3, 1874; application filed January 10, 1874.

To all whom it may concern:

Be it known that I, Shubael Cottle, of the city, county, and State of New York, have invented a new and useful improvement in chain necklaces, of which the following is a specification:

Figure 1 is a side view of a portion of my improved chain for necklaces, &c. Fig. 2 is a view of the same turned one-quarter around; and Fig. 3 is a cross-section of the same, taken through the line *x x*, Fig. 1.

My invention has for its object to furnish a chain for necklaces, &c., formed of the usual round closed links and open spiral links of peculiar construction, alternately arranged, each alternate link being polished or colored, and which shall be so constructed that the links may all be finished separate and then put together to form the chain, thus avoiding the necessity of coloring the whole chain, and then polishing the alternate links, which is very laborious, and makes the article very expensive. The invention consists in a chain for necklaces formed of alternate closed links and open spiral links, as hereinafter more fully described.

A and B represent the links of the chain. The links A are round and close, as shown in Fig. 1, and are made and polished separate from the other links. The links B are formed by two or more coils of tubing of the proper length, so as to form a double-spring link. Into each end of the tube forming the link B is soldered a small shot, as shown in the drawing, which shot gives a finish to the link. The links B are then colored, and the chain is formed by springing the links A into the links B, so that they may alternate with each other. The links A B may be made, the one kind round and the other oval, or both kinds may be made round. The first construction is preferred, as producing a more elegant chain. Either kind of links A B may be polished and the other colored; but I prefer to polish the closed links and color the open spiral ones, as producing a more pleasing effect.

By this kind of construction, each kind of link may be made and finished in quantities, and the chain formed from the finished links by springing the closed links into the open spiral ones until a necklace of the required length is formed.

Having thus described my invention, I claim as new and desire to secure by letters patent—

An ornamental chain for chain necklaces, &c., formed of alternate closed links A and open spiral links B, when constructed substantially as herein described and shown.

SHUBAEL COTTLE.

Witnesess:
JAMES T. GRAHAM.
T. B. MOSHER.

107 *Compl'ts Exhibit B.—J. G., Jr., Ex'r.*

65.

(Engraving of eagle.)

The U. S. Patent Office to all persons to whom these presents shall come, greeting:

This is to certify that the annexed is a true copy from the records of this office of the reissue letters patent granted Mulford, Hale & Cottle, dated Feb'y 24th, 1874, No. 5774, for "Imp't in chains and chain links for necklaces, &c."

In testimony whereof I, J. M. Thacher, Acting Commissioner of Patents, have caused the seal of the Patent Office to be hereunto affixed this 24th day of July, in the year of our Lord one thousand eight hundred and seventy-four, and of the Independence of the United States the ninety-ninth.

[L. S.]

J. M. THACHER,
Acting Commissioner.

No. 5774. (Engraving of Patent Office.) Reissue.

The United States of America to all to whom these presents shall come:

Whereas Shubael Cottle, of New York, New York, assignor to Mulford, Hale & Cottle, of same place, has presented to the Commissioner of Patents a petition praying for the reissue of letters patent for an alleged new and useful improvement in chains and chain links for necklaces, &c. (for which letters patent were issued to said assignors, dated February 3d, 1874, which letters having been surrendered, the same have been canceled, and new letters ordered to issue to them on an amended specification), a description of which invention is contained in the specification of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such cases made & provided; and whereas upon due examination made the said claimant is adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said Mulford, Hale & Cottle, their heirs or assigns, for the term of seventeen years from the 3d day of February, 1874, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the city of Washington, this 24th day of February, in the year of our Lord one thousand eight hundred and seventy-four, and of the Independence of the United States of America the ninety-eighth.

[L. S.]

B. R. COWEN,
Acting Secretary of the Interior.

Countersigned.
M. D. LEGGETT,
Commissioner of Patents.

108 S. Cottle. Chains and chain-links for necklaces, &c. No. 5774. Reissued Feb. 24, 1874.

Fig. 1.

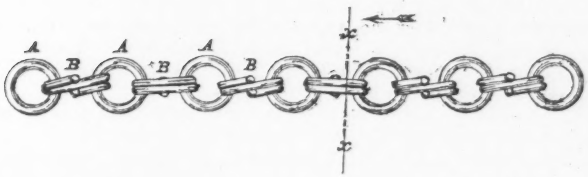


Fig. 2.

Fig. 3.

SHUBAEL COTTLE,
Inventor,
By MUNN & CO.,
Attorneys.

Witnesses:
A. G. ALMQVIST.
SOLON C. KEMON.

109 UNITED STATES PATENT OFFICE.

Shubael Cottle, of New York, N. Y., assignor to Mulford, Hale & Cottle, of same place. Improvement in chains and chain-links for necklaces, &c.

Specification forming part of letters patent No. 147045, dated February 3, 1874; reissue No. 5774, dated February 24, 1874; application filed February 21, 1874.

To all whom it may concern:

Be it known that I, Shubael Cottle, of the city, county, and State of New York, have invented a new and useful Improvement in Chains for Necklaces, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a side view of a portion of a chain-necklace illustrating my invention. Fig. 2 is a view of the same turned one quarter around. Fig. 3 is a cross-section of the same, taken through the line *y y*, Fig. 1.

My invention has for its object to furnish an improved chain for necklaces, &c., having links of peculiar construction, which enable all the links to be finished separate, and then put together to form the chain. The invention consists in an ornamental chain whereof the links are connected together by open spiral links B finished before being connected together, the connection being made by springing the finished links into each other in the manner described.

I will now describe the chain represented in the drawing to illustrate my invention.

A and B represent the links of the chain. The links A are round and closed, as shown in Fig. 1, and are made and polished or colored separately from the other links. The links B, which constitute the peculiar feature of my invention, are formed of one or more coils of tubing of the proper length, so as to form a double spring-link. Into each end of the tube forming the link B is soldered a small shot, as shown in the drawing, which shot gives a finish to the link. The links B may then be colored or polished, and the chain is formed by springing the links into each other. The links A B may be made the one kind round and the other oval, or both may be made round, or both oval.

The first construction is preferred, as producing a more elegant chain. Either kind of the links A B may be polished and the other colored, or both may be polished or both colored, but I prefer to polish the closed links and color the open spiral links, as producing a more pleasing effect. By this construction the links may be made and finished in quantities, and the chain formed from the finished links by springing them into each other to produce any desired combination of the links of the same or different kinds. Finishing the separate links in this way enables them to be more perfectly polished or colored, and with a greatly diminished expenditure of labor and time, and enables the links to be put together without injuring them in the least, however highly they may be polished or colored.

Having thus described my invention, what I claim, is—

1. An ornamental chain for necklaces, &c., formed of alternate closed links A and open spiral links B, substantially as shown and described.

2. The open spiral link B formed of coils of tubing, substantially as shown and described.

SHUBAEL COTTLE.

Witnesses:

JAMES T. GRAHAM.

T. B. MOSHER.

110 At a stated term of the circuit court of the United States of America for the southern district of New York, in the second circuit, held at the United States court-rooms in the city of New York, on Wednesday, the seventh day of April, in the year of our Lord one thousand eight hundred and seventy-five.

Present, the honorable Nathaniel Shipman, circuit judge.

LEWIS J. MULFORD & AL.
vs.
THOMAS D. PEARCE.

The above cause coming on for final hearing upon pleadings & proofs. Mr. B. F. Lee argues on behalf of complainants.

Mr. Henry Baldwin, jr., argues on behalf of the defendant.
Mr. B. F. Lee is heard in reply.
Cur. adv. vult.

111 United States circuit court, southern district of New York.

LEWIS J. MULFORD ET AL.
vs.
THOMAS D. PEARCE ET AL.

SHIPMAN, J.:

This is a bill in equity, alleging an infringement by the defendants of reissued letters patent, which were issued to the complainants on February 24th, 1874, for an "Improvement in chains and chain-links for necklaces," etc., and praying for an injunction and an account. The defendants, admitting in their answer the manufacture and sale of the patented article, deny the novelty or patentability of the alleged invention, and further insist that the patent is invalid by reason of the vagueness of the specification. The specification states that—

"The invention has for its object to furnish an improved chain for necklaces, etc., having links of peculiar construction, which enable all the links to be finished separate and then put together to form the chain. The invention consists in an ornamental chain, whereof the links are connected together by open spiral links B, finished before being connected together, the connection being made by springing the finished links into each other in the manner described. A and B represent the links of the chain. The links A are round and closed, and are made and polished, or colored, separately from the other links. The links B, which constitute the peculiar feature of my invention, are formed of one or more coils of tubing of the proper length, so as to form a double-spring link. Into each end of the tube forming the link
112 B is soldered a small shot, as shown in the drawing, which shot gives a finish to the link. The links B may then be colored or polished, and the chain is formed by springing the links into each other. . . . By this construction the links may be made and finished in quantities, and the chain formed from the finished links, by springing them into each other to produce any desired combinations of links of the same or different kinds. Finishing the separate links in this way enables them to be more perfectly polished or colored, and with a greatly diminished expenditure of labor and time, and enables the links to be put together without injuring them in the least, however highly they may be polished or colored."

The claims of the inventor are:

"1. An ornamental chain for necklaces, etc., formed of alternate closed links A and open spiral links B, substantially as shown and described.

"2. The open spiral links B, formed of coils of tubing, substantially as shown and described."

Ornamental gold chains, formed of alternate closed links and spiral links, or of spiral links alone, have long been known. Chains composed of split rings which are "sprung" into each other, or into a solid link, are familiar articles, and there can be no novelty in the mere shape or form of the chain, or of the link, which is shown in the drawings of the patent. The distinctive feature of the invention does not consist in the fact that the link is spiral, but does consist in the construction of the open spiral link from a specified material, viz, gold tubing. The article which is called tubing in the jeweler's art is made by drawing a

strip of gold through a draw-plate, the gold strip having been placed around a copper wire in such a manner as to incase the wire. The copper wire with the strip of gold around it is then wound upon a mandrel and cut into proper lengths. The copper is destroyed by acid, leaving a hollow spiral link, which is bound with wire and annealed. The wire is then unfastened, and the link which is thus made possesses a peculiar elasticity not affected by the annealing, is easily separated and united to another link without any injury to itself or to the solid link into which it is sprung, and constantly preserves its elasticity and shape.

113 The discovery which led to the invention consisted in the discovery of the fact that links made of tubing possessed a peculiar elasticity which was unaffected by the annealing. The invention was the application of this discovery to the production of a new and useful result, namely, the manufacture from tubing of ornamental chains, which possess the following elements of novelty and utility:

First. All the links can be completely finished and then put together without injury to the chain, and thereby the article can be produced at a much less expense than had previously been necessary. Gold chains which are constructed in any other manner must be finished or polished or colored after the chain is completely formed, which is a difficult and somewhat expensive part of the manufacture, while, inasmuch as their links are sufficiently elastic to be united together or sprung upon a solid link without injury to any part of the chain, the separate links can be made in quantities and completely finished and polished before being united.

Second. The elasticity of the spiral links is such that the chain can easily be separated by the fingers of the owner, and united in different forms and for different purposes, and reunited in the original chain without detriment to the polish of the links, and with no loss of their elasticity. As has already been suggested, these features of novelty and utility do not result from the fact that the chain is made in part from a spiral link, but from the fact that the spiral link is manufactured from a material which possesses a peculiar quality of permanent elasticity. The invention consists in the fact that whether the inventor was or was not the first person to discover the peculiarity, he first utilized the discovery, and applied the peculiar property of the material to a useful result in the manufacture of chains.

It being self-evident that chains composed of spiral links have been well known, it was insisted by the defendants that the chains heretofore in use possessed substantially the same qualities which are attributed to the patented article; and that the patented article had no advantage over the chains which were introduced as exhibits, and which were made of gold split rings or split links in various forms. But it was satisfac-

114 torily proved that the split rings, which are manufactured from solid gold wire compressed in dies, and made elastic by hammering, are not sufficiently elastic to permit the chain to be joined without injury to the material into which the split link is sprung, and this injury renders necessary a repolishing or finishing of the completed article. Again, if the chain of split gold links is taken apart the act of separation causes the coil to spring asunder so that it loses its shape and beauty, and if a necessity of annealing arises the process of annealing destroys its elasticity. The difference between the patented article and a chain made of split gold rings is clearly marked. It is a difference in kind and not merely in degree.

Testimony was also offered by the defendants to prove that chains of spiral links made of tubing had been in use prior to the date of the inven-

tion, but the evidence failed to satisfy me that chains of open and unsoldered spiral links made of tubing had been manufactured prior to the date of the patent. Links have been made of tubing, which, after being united in a chain, were soldered together, and thus a chain was made which could not be taken apart and which required finishing and polishing after it was soldered together. The testimony did not show that the plaintiff's invention of the open spiral link from tubing had been practically anticipated by others.

A large serpentine bracelet, made of a coil of gold tubing, to be worn upon the fore-arm, and to be kept in its place by pressure, was also introduced as an anticipating device. It manifestly is a very different article from a chain, and the fact that a gold tubing was known and used in the manufacture of jewelry was conceded by the plaintiffs.

was also suggested by the defendants that the specification does not describe the process of manufacture of the spiral link with the exactness which is requisite. The manner in which gold tubing is manufactured is well known to all persons skilled in the art. After having been compressed around copper wire it is wound upon a mandrel; the wire is then removed by acid, and the coil of tubing, having been secured with wire, is annealed into the proper shape. This process is thoroughly understood by the manufacturing jeweler. It would have been a
115 waste of words to explain the method of manufacture to a class of persons who are sufficiently informed when they are told that the link is "formed of one or more coils of tubing of the proper length so as to form a double spring link."

The first claim is not a claim for an ornamental chain composed of alternate closed links and open spiral links without reference to the material of which the spiral link is made, but it is a claim for a chain composed of alternate closed links, and open spiral links formed of one or more coils of gold tubing, as shown and described. The finish, as given to the chain by the shot at the end of the open link, is not a material part of the invention.

There should be a decree for an injunction, and a reference to a master to take and state the account.

(Endorsed:) Filed Nov. 3d, 1875.

116 At a term of the circuit court of the United States for the second circuit and southern district of New York, held at the city of New York, on the 21st day of April, 1875.

Present, honorable Nathaniel Shipman, judge.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL Cottle, and Samuel P. Barker,
vs.
THOMAS D. PEARCE, FRANK KURSH, AND Frank Ferrale.

This cause came on to be heard at this term upon the pleadings and proofs, and was argued by counsel, and thereupon, upon consideration thereof, it is ordered, adjudged and decreed as follows, viz:

That the reissued letters patent No. 5774, dated February 24th, 1874, granted to Shubael Cottle, assigned to Mulford, Hale & Cottle for an improvement in chains and chain links for necklaces, &c., originally patented February 3, 1874, is a good and valid patent; that said Cottle was the original and first inventor of the improvements therein
117 described and claimed; and also that the said defendants have

infringed upon the said patent and upon the exclusive rights of the complainants under the same.

And it is further ordered, adjudged and decreed that the complainants do recover of the defendant, Thomas D. Pearce, the profits, gains, and advantages which the said defendant has received, or which have arisen or accrued to him from said infringement of the said patent, by the manufacture, use or sale of the improvements described and secured by the said reissued letters patent No. 5774, since February 24th, 1874, and also such damages in addition to said profits, as the complainants may have sustained by reason of said infringements.

And it is further ordered, adjudged and decreed that the said complainants do recover of the defendants their costs, and charges, and disbursements in this suit to be taxed.

And it is further ordered, adjudged and decreed that it be re-
118 ferred to Richard E. Stilwell, esq., one of the masters of this court, residing in the city of New York, to ascertain and take and state and report to the court an account of the gains, profits, and advantages which the said defendant has received, or which have arisen or accrued to him, since February 24th, 1874, from infringing the said exclusive rights of the said complainants, by the manufacture, use and sale of the said improvements patented in the said reissued letters patent, and also what damages in addition thereto the complainants have have sustained by reason of said infringements.

And it is further ordered, adjudged, and decreed that the complainants on such accounting have the right to cause an examination of said defendant ore tenus, or otherwise, and also the production of the books, vouchers, and documents of the defendant, and that the said defendant attend for such purpose before said master from time to time as said master shall direct.

119 And it is further ordered, adjudged and decreed that a perpetual injunction be issued strictly commanding and enjoining the said defendant, his clerks, attorneys, agents, servants, and workmen, under the pains and penalties that may fall upon them, and each of them, in case of disobedience, that they forthwith desist from making, manufacturing, using, and selling, in violation of said letters patent, any ornamental chains, or chain links, involving or embracing, or manufactured in pursuance of, the invention secured to the complainants by virtue of said reissued letters patent No. 5774.

N. SHIPMAN, *Judge.*

120 (Indorsed:) U. S. circuit court, south. dist. of New York. Lewis J. Mulford et al. vs. Thomas D. Pearce et al. Decree. Lee & Alvord, compl'ts' sol'rs, 20 Nassau st., N. Y. Filed April 21, 1875.

121 EXHIBIT 1.—K. G. W., *Master, etc.*

Table showing average statistics.

No. of pattern.	No. of chains.	No. of spirals.	Weight of chains.	Total.	Proportionate weight of spirals.
1487	79	28	20 dwt.	1,580 dwt.	½ 790 dwt.
1472	7	60	36 "	252 "	all 252 "
1566	29	15	21.5 "	623.5 "	½ 155.4 "
1567	34	15	21.5 "	731 "	¼ 182.7 "
1624	24	15	14 "	336 "	¼ 84 "

122 United States circuit court, southern district of New York.

LEWIS J. MULFORD, SETH W. HALE AND others
vs.
THOMAS D. PEARCE, FRANK KURSH AND others.

Reference under decretal order filed April 21st, 1875.

JANUARY 6TH, 1876.

Present, B. F. Lee, esq., counsel for complainants, and J. C. Fraley, esq., for defendants.

Counsel for defendants admits that the defendants have made and sold the chains specified in Exhibit No. 1, and stipulates to produce photographs of each of the five patterns named in the exhibit.

SHUBAEL COTTLE sworn on part of complainant.

Am member of complainants' firm and one of the plaintiffs. I have examined the statement, Exhibit 1, of number of chains, etc., admitted by defendants.

Q. Will you please state what net profits the complainants would have made by the manufacture and sale of such chains, the number and weight stated in said exhibit, and give the details by which you arrive at the result?

(Objected to as irrelevant; overruled and exception.)

A. The net profit would be $1,220.78. This is at the rate of $0,34.65 per dwt. profit. The total number of dwts. is 3,522½; the gold costs 63 cents per dwt. in gold, making for the cost of the gold in gold $2,219.17.

123 The average premium on the gold was 157, making the cost in currency $2,552.04. The entire labor on the chain, including the cost of the snap-catch, is $3.50 for each chain, on an average; making the total cost of labor $605.50, including snaps; making a total cost thus far of $3,157.54. For shop expenses add 10 per cent. on this amount, making $315.75, making the total cost, delivered in the sales-room, $3,473.29.

These chains were at the time covered by this infringement for $1.50 per dwt., making the amount received for the quantity specified of such chains	$5,283	75
From this deduct four per cent., the average discount allowed to customers	211	35
Deduct further for expense account, bad debts, cost of selling, interest on capital, rent of sales-rooms, traveling expenses, expressage, etc., etc., seven and a half per cent. being	378	33
This leaves a net profit of	1,220	78

as stated above.

No part of this profit was made on the snaps. The snaps cost us all we get for them; of the $3.50 for labor in making the chains 75 cents is for labor on the snap.

Adjourned to the 12th inst., at eleven a. m.

JANUARY 12TH, 1876.

Adjourned to the 28th inst., at eleven a. m.

JANUARY 28TH, 1876.

Present, counsel for respective parties.

Witness Cottle, continued.

Defendant produces photographs of the different kinds of chains in Exhibit No. 1, and they bear corresponding numbers to those in the exhibit.

Cross-examination of Mr. Cottle:

Complainants have never made any chain of the combination shown in the photographs Nos. 1567, 1566, nor 1624. We have made chains like 1472 and 1487. I would not like to say what proportion the spiral links in 1566 bear in weight or cost to the entire chain. It would be a mere guess.

Q. In the patterns 1624, 1566, and 1567, if the spirals weighed one-quarter of a chain, would they make one-quarter of the cost and profit, as you have estimated it?

124 (Objected to as immaterial. Overruled and exception.)

A. They would cost less per dwt., and hence the profit would be greater. In 1487 the spirals weighed two-thirds of the chain, and on that supposition would cost $10.46, while the closed links and snaps would cost $8.06 about. The two-thirds or spiral portion has sold for $17.76, and the other or closed portion sold for $8.88 about.

Q. In your estimate of the profit in your evidence-in-chief, how much do you assign to the open spiral link, or how much do you claim is due to the fact that the spiral link is open?

(Objected to as irrelevant and incompetent, considering the claims of the patent. Overruled and exception.)

A. I made no estimate of profit assigned to the one or the other, but estimated both together.

(Counsel for defendants refers the master to the printed proofs taken in the cause for final hearing on part of complainant at page 26, question 71, put to present witness, as showing that complainant by reason of any sales made by the defendants has suffered no loss or damage.)

Q. What is the saving in cost of manufacturing chains which is due to the peculiar method in the patent over any other mode previously existing.

(Objected to, overruled, and exception.)

A. In a chain like 1487 it would make a difference of at least one dollar per chain whether the links were soldered together or whether they were open.

Q. In the other patterns of chains shown with photographs, what would be the saving in cost by making them with the open spiral?

(Objected to, overruled, exception.)

A. In 1624, 1566, and 1567 I should estimate it would be about fifty cents per chain, and in 1472 at least $1.25.

Adjourned to 29th inst., at ten a. m.

JANUARY 29TH, 1876.

Present, counsel for respective parties.

Cross-examination continued.

125 In my estimate of cost I have taken into account the quality of gold in defendant's statement, and have assumed it to be fourteen carat from the price per dwt. Cannot tell whether it was alloyed

with silver or copper. I do not know, nor do I believe, that if the spirals were made of fourteen carat gold, in which the alloy is silver alone, they would have no elasticity. The spiral now shown me is an elastic one, such as is described in the patent.

(Witness is called upon to spring a solid link into it, which is done, and the same is produced by the defendants as an exhibit and marked Link No. 1.)

Defendant also produces two other links, which witness is called upon to spring together, and does so; these are marked Link No. 2.)

The spiral now shown me is not an open spiral, because it is soldered. It is soldered along the seam.

(Witness springs this on to a solid ring. The same is marked Link No. 3.)

The reason the link stays apart is that it is soldered; the link is made of tubing.

Redirect:

I understand the photograph 1567. It shows a chain formed of alternate closed links and open spiral links as described in my patent. What is represented between the two spirals is one closed link. Photograph 1624 shows a chain which is claimed by the first claim of my patent, and is adjustable like that shown in the drawing of the patent. The same is true of 1566.

Q. In 1566, 1567, and 1624, what proportion of the profit would be due to the spiral links alone, if you had manufactured them as stated in your direct examination?

A. It would be $2.29 on each about; on 1567 the same; on 1624, about $1.32 per chain.

Q. In 1566 and 1624 what would be the profit derived from the open spiral links, and the two closed links immediately connected therewith, without considering the rest of the chain?

A. Think the profit on the two links together about the same as the spiral.

126 APRIL 10TH, 1876.

Present, counsel for respective parties.

Witness Cottle continued on redirect:

Q. Will you state what net profit complainants would have made by the manufacture and sale of chains of the patterns 1472, 1487, 1566, 1567, and 1624, specifying each separately, the same being of the number, weight, and proportionate weight of spirals designated in defendant's Exhibit No. 1?

(Defendant's counsel objects to question as improperly extending the inquiry to speculative damages and beyond the scope of infringement of the patent; also because it does not appear that complainants ever made chains like the patents exhibited other than 1487.

All the proceedings, proofs, and pleadings are put in on this hearing before the master.

Objection overruled and exception taken.)

A. On 1487, $541.23; on 1472, $107.90; on 1566, $221.80; on 1567, $260.22; on 1624, $87.39; making total, $1,218.54.

Q. Will you state what part of the net profit spoken of in last answer would be derived from the spiral alone in each pattern, assuming the proportionate weight of spirals to be as stated in the last column of Exhibit No. 1, stating each separately?

A. On 1487, $360.82; on 1472, $107.90; on 1566, $55.45; on 1567, $65.05; on 16.24, $21.85. Total, $611.07.

Q. Will you state what proportion of the profit derived from the whole chain of each pattern would be derived from the spiral and one adjoining link?

(Same objection as before. Overruled and exception.)

A. On 1487, $541.23; on 1472, $107.90; on 1566, $77.26; on 1567, $260.22; on 1624, $29.13. Total, $1,015.74.

Q. Will you state what proportion of the profit derived from the whole chain of patterns 1566 and 1624 would be derived from the spiral and the two links between which it is? I mean by links the part of the chain extending from where the spiral joins upon the next flexible joint, and not all intermediate between two successive spirals.

127 (Same objection, overruled and exception.)

A. I made my estimate only on the spiral and the two little rings which are soldered to the rest of the chain. This on 1624 would be $36.40; on 1566, $92.40. As the question was asked, the amount would be larger.

Q. Will you state in reference to your answer to question 71 in the proof for final hearing how and under what circumstances, and for what reason, you could not fill certain orders as therein stated?

(Objected to as incompetent, overruled and exception.)

A. We had orders in the month of December which we could not fill at the day they were ordered, for the reason that they would not wait for us to make them, and they could go in next door and get them without waiting for them. The defendant's store was next door to us, on the same floor and same building. I was accustomed to see defendant s goods, and they were not made of silver alloy. Never saw any tha't were soldered up. Exhibit link No. 3 is tubing, with the seam soldered.

Cross-examined:

In the net profit I have given, I have taken out all items of cost of manufacturing and selling. On the photograph 1624 I find three open spiral links. On photograph 1567 I find two. On photograph 1487 I find three. On photograph 1472 I find three. On photograph 1566 I find three.

FRANK KURSH, called and sworn on part of complainant, says:

Q. What proportion of the chains of the patterns 1472, 1487, 1566, 1567, and 1624 were made with spirals, soldered up like Ex. Link No. 3, by the defendants?

A. None.

Q. 2. What proportion of the chains of the five patterns named in the last question had the spirals made of the alloys shown in Ex. Link No. 1 and link No. 2?

A. None.

Cross-examined:

X Q. 3. In the pattern 1566 how many closed links are there between two open spiral links?

128 (Objected to as not cross-examination.)

A. Eight.

X Q. 4. In the pattern 1624 how many closed links are there between two open spiral links?

(Same objection.)

A. Eighteen.

X Q. 5. In the pattern 1567 how many closed links are there between two open spiral links?

(Same objection.)

A. Two.

X Q. 6. In the pattern 1472 are there any closed links between the open spiral links?

(Same objection.)

A. None.

Redirect, reserving objections:

Redirect Q. 7. In the pattern 1566, are not the eight links of which you have spoken soldered together so as to form less than eight links movable upon each other? And if yea, state precisely how it is constructed.

A. There are four movable links; the three double links in the centre are soldered together, but move at every joint, and the two outside ones move in the double ones.

Redirect Q. 8. In the pattern 1624 how many joints are there between the two rings into which the spirals are sprung, where the links are movable upon each other?

A. Eight.

Redirect Q. 9. Describe exactly where they are, and how they are constructed.

A. The single ring on each end is soldered to the rope-like double ring; the following two are always movable.

Redirect Q. 10. In the pattern 1567 state whether or not there is any movable joint except that of which the spiral link forms a part.

A. The rings are soldered together in that case.

Redirect Q. 11. Question repeated.

A. No.

Redirect Q. 12. Then the intermediate portion between the spirals in 1567 is soldered together into one piece, is it not?

129 A. That is a section of chain soldered together.

Question repeated.

A. It is soldered stiff together, forming one piece out of two links.

Recross-examined:

Re-X Q. 13. In 1566, 1624, or 1567 is the part between two spiral links removable or separable?

A. It is not.

Testimony closed.

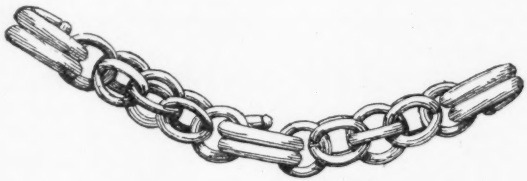
(Endorsed:) Filed July 28th, 1876.

1472.

1487.

1567.

1624.



1566.

130 NEW YORK, *May* 23, 1876.

HENRY BALDWIN, jr.,
217 *South Sixth street, Philadelphia.*

DEAR SIR: Enclosed please find the substance of my proposed report in Mulford vs. Pearce. Please inform me whether you desire to submit any points or not before the same is filed. I have sent a copy to Mr. Lee.

Yours, very truly,

KENNETH G. WHITE,
Per S. N. W.

Circuit court of the United States for the southern district of New York.
In equity.

LEWIS J. MULFORD, SETH W. HALE AND others
vs.
THOMAS D. PEARCE & OTHERS.

I, Kenneth G. White, the master to whom it was referred by a decretal order of court, dated April 21, 1875, to (here insert language of order) do find and report as follows:

First. That no proof has been produced before me showing any profits made by the defendants from the use or infringement
131 of the patent upon which this suit was brought, and in which suit the decree and order of reference was made.

Second. That proof has been produced before me showing what damages have been sustained by the complainants by the manufacture and sale by the defendants of the articles covered by the patent of complainants, and that such damages are the profits which the complainants would have made upon the manufacture and sale of the entire chains, such as are shown in Exhibit 1, hereunto attached, and numbered respectively 1472, 1487, and 1567, and also shown in the photographs with like numbers, which are hereunto attached, which chains I find to be covered by the first claim of complainants' patent.

That the proofs show that the complainants have sustained damage by the manufacture and sale by the defendants of the other chains shown in Exhibit 1, and in the photographs hereunto attached, and designated respectively as 1566 and 1624, and that the extent or measure of such damage is the profit which the complainants would have made upon the open spiral links alone used in such chains, which links the master finds to be covered by the second claim of complainants' patent.

The damages I find and report are as follows, viz:

On chains like No. 1472, profits which complainants would have made on entire chain	$107 90
Ditto, as to 1487	541 23
Ditto, as to 1567	260 22
On chains like 1566, profits which complainants would have made on spiral links alone on said chain	55 45
Ditto, as to 1624	21 85
Total	$986 65

I find and report under the decree and order of reference that the damages sustained by the complainants are, as above stated, the sum of nine hundred and eighty-six dollars and sixty-five cents ($986.65).

All which is respectfully submitted.

132 *Exceptions on behalf of the defendant, Thomas D. Pearce, to the draft report of said master. Before Kenneth G. White, esq., special master.*

United States circuit court, southern district of New York. In equity.

LEWIS J. MULFORD ET AL.
vs.
THOMAS D. PEARCE ET AL.

To the following finding of said draft report, to wit:

"Second. That proof has been produced before me showing what dam-

ages have been sustained by the complainants by the manufacture and sale, by the defendants, of the articles covered by the patent of the complainants, and that such damages are the profits which the complainants would have made upon the manufacture and sale of the entire chains, such as are shown in Exhibit 1, hereunto attached and numbered respectively 1472, 1487, and 1567; and also shown in the photographs with like numbers which are hereto attached, which chains I find to be covered by the first claim of complainants' patent.

"That the proofs show that the complainants have sustained damage by the manufacture and sale by the defendants of the other claims shown in Exhibit 1, and in the photographs hereunto attached, and designated respectively as 1566 and 1624, and that the extent or measure of such damage is the profit which the complainants would have made upon the open spiral link alone used in such chains, which links the master finds to be covered by the second claim of complainants' patents.

"The damages I find and report are as follows:

133	"On chains like No. 1472, profits which complainants would have made on entire chain	$107 90
	"Ditto, as to 1487	541 23
	"Ditto, as to 1567	260 22
	"On chains like 1566, profits which complainant would have made on spiral links alone in said chain	55 45
	"Ditto, as to 1624	21 85
	"Total	$986 65

"I find and report under the decree and order of reference that the damages sustained by the complainants are, as above stated, the sum of nine hundred and eighty-six dollars and sixty-five cents ($986.65)."

Defendant excepts, and respectfully submits to the master the following grounds of exceptions:

I.

The first claim of the patent is stated in the opinion of the court, as follows: "The first claim is not a claim for an ornamental chain, composed of alternate closed links and open spiral links, without reference to the material of which the spiral link is made, but it is a claim for a chain composed of alternate closed links and open spiral links, formed of one or more coils of gold tubing, as shown and described."

Under this definition of the first claim, the right inquiry for the master in pursuance of the order of reference is (as to this claim), what damages have the complainants sustained by the defendants' manufacture and sale of chains composed of alternate closed links and open spiral links formed of one or more coils of gold tubing, as shown and described?

The first branch of this inquiry leads to the fact that defendant had a right to make chains of alternate links, one solid and one of tubing, provided he soldered the tubing together so as to make it also a closed link. The point of infringement resided entirely in leaving the links of tubing unsoldered or open.

The question to be determined, therefore, was, "What advan-
134 tage did the defendant derive from using the complainants' invention—the open links—over what he had in using other links then open to the public, and adequate to enable him to obtain an equally beneficial result?"

The fruits of that advantage are his profits. They are all to be derived from the existence of complainants' invention. (Mowry vs. Whitney, 14 Wall., 651).

They are all complainants would have derived from the invention, and therefore they determine the damages accruing to them.

Without specially citing the proofs in the case, the master is referred to the opinion of the court in this case for the established fact that "ornamental gold chains formed of alternate closed links and spiral links, or of spiral links alone, have long been known. Chains composed of split rings which are sprung into each other, or into a solid link, are familiar articles, and there can be no novelty in the mere shape of or form of the chain, or of the links, which is shown in the drawings of the patent. The distinctive feature of the invention does not consist in the fact that the link is spiral, but does consist in the construction of the open spiral link from a specified material, viz, gold tubing."

Upon the facts and the law it is manifest that the defendant had a right to make his chains of alternate closed links and open spiral links, the spiral links being made of solid gold wire, and this leads to the inquiry—

Second. What advantage has defendant gained, or what damage have complainants suffered by reason of the defendants having used open spiral links of gold tubing over what would have ensued from the use of open spiral links of solid wire? The complainant Cottle himself proves this to be only $1 per chain in the pattern 1487, even as between the link of spiral tubing left open and the same link soldered together, while in the other patterns he estimates it at 50 cents per chain on patterns 1624, 1566, and 1567, and at $1.25 on the pattern 1472. He does not pretend to say that it would be anything like that as between open spiral solid links and open spiral tubing links. But the testimony at
135 most only warrants the master in finding the actual damages proved to be $1.25, $1, and 50 cents per chain, that being all that is shown to be due to the patent, and that being saved by the finishing of the links separately. (See his testimony before the master.)

The master, therefore, should find that the damages proved as to the first claim of the patent are—

On 7 chains of pattern				1472	@	$1.25	per	chain	.....		$8 75
On 79 chains of pattern				1437	@	$1.00	"	"	.....		79 00
" 29	"	"	"	1566	"	50	cents	per	chain	.....	14 50
" 34	"	"	"	1567	"	50	"	"	"	.....	17 00
" 24	"	"	"	1624	"	50	"	"	"	.....	12 00
Total											$131 25

instead of $986.65, and defendant prays him to amend his finding in this respect and to this effect.

II.

It is incumbent on the complainants to prove their actual damages, apportioning the profits on the unpatented parts of the thing patented, so that the master may ascertain the actual profits or damages on the patented parts; and in default of such proof by complainants the master should find only nominal damages. (The Gould Manufacturing Co. vs. Cowing, 12 Blatch., 251, 252.)

The witness Cottle testifies before the master that the complainants would have made net profits on chains, such as comprised in Exhibit I, to the amount of $1,220.73; but on cross-examination, being asked, "In your estimate of the profits, in your evidence-in-chief, how much do you assign to the open spiral link, or how much do you claim is due to the fact that the spiral link is open?" He says, "I made no estimate of profit assigned to the one or the other, but estimated both together."

Upon this it is submitted to the master that the defendant having a right, as is before stated, to make chains of alternate open and closed spiral links, the spirals being solid, it is not proper to assign to the patent the profits on the entire chain. And even the entire profit on the spiral links of tubing is not assignable to the patent, but only the profit on the spiral links of tubing left open.

136

The witness Cottle only claims that the profits complainants would have made on the open spirals of tubing would have been—

On pattern	1566,	$2.29	per chain	on 29	chains	.....	$66 41
"	1567,	2.29	"	34	"	.....	77 86
"	1624,	1.32	"	24	"	.....	31 68
Total						.....	$175 95

But this does not discriminate any profit due to the patent from the profit due to the entire manufacture, only a part of which is covered by the patent.

If defendant had soldered the spiral links there would have been no infringement, and the question therefore is what was gained by not soldering those links together.

It is respectfully submitted to the master that the "mere guess" of the witness Cottle is not adequate proof upon which to base an award of damages, and that no apportionment of the profits having been made between the parts of the chain patented and those parts not patented, the master should find either nominal damages only, or else base his finding upon the only actual basis of calculation afforded by the evidence, and stated under paragraph one, to wit: $1, $1.25, and 50 cents per chain, and the defendant prays he will amend his draft report accordingly. (Ransom vs. City of New York, 23 How., 487; Hitchcock vs. Tremaine, 9 Blatch., 389.)

III.

The witness Cottle having testified that complainants never made any chains of the patterns Nos. 1567, 1566, or 1624, the master should not find that they ever would have made such chains, and therefore should limit his finding of damages proven upon them to the saving of fifty-cents per chain upon those patterns, and the defendant prays the master to amend his draft report accordingly.

137

IV.

The witness Cottle having testified in the case in chief (Record, p. 26 q. 71) that complainants nearly every day in December (1874) received orders which they could not fill, as they had not the goods for the orders, although they sold all they had on hand and all they could make without interfering with other goods, it is not proved that complainants would have made or sold the chains made and sold by defendant, or that

they have suffered any damage or loss in that behalf by reason of defendant's sales; but, on the contrary, it is proved by this testimony that the only damage which complainants have sustained has been the advantage which defendant gained by the separate finishing of the open spiral links of tubing, to wit: $1.25, $1.00, and 50 cents, respectively, upon the several patterns comprised in Exhibit 1.

And the master's attention is called to the inconsistency between the testimony of said Cottle above referred to and his answer before the master that "we had orders in the month of December which we could not fill at the day they were ordered, for the reason that they would not wait for us to make them, and they could go in next door and get them without waiting for us." Whereas he had said in the original case, "We have sold all we had on hand and all we could make without interfering with other goods."

The defendant respectfully submits that this is not competent testimony upon which to base a finding that the complainants would have made or sold the chains sold by defendant, or would have made the alleged profits thereon, and he prays the master to amend his finding in this respect accordingly.

138 V.

The evidence adduced before him does not warrant the master in finding and reporting under the decree and order of reference that the damages sustained by the complainants in the premises are nine hundred and eighty-six dollars and sixty-five cents, but on the contrary shows that the only actual damages proven are, as stated under paragraph I, one hundred and thirty-one dollars and twenty-five cents ($131.25), to wit: $1.25 per chain on pattern 1472; $1 per chain on pattern 1487; 50 cents per chain on patterns 1566, 1567, and 1624. And he prays the master to amend his finding in this respect accordingly.

All of which is respectfully submitted.

HENRY BALDWIN, JR.,
Of Counsel with Defendant Thos. D. Pearce.

PHILADELPHIA, *June 7th*, 1876.
No. 217 South Sixth Street.

(Endorsed:) U. S. circuit court south. dist. N. Y. In equity. Mulford et al. vs. Pearce et al. Exceptions to the master's draft report. Henry Baldwin jr., for defendant T. D. Pearce. Filed Dec. 11, 1876.

The within exceptions to my draft report were filed with me by the counsel for defendant Thomas D. Pearce on or about the 9th of June, 1876, and are returned by me to the court as part of the proceedings before me at the request of said counsel.

New York, Dec. 6, '76.

KENNETH G. WHITE,
Master, &c.,

139 Circuit court of the United States for the southern district of New York.

LEWIS J. MULFORD, SETH W. HALE, and others,
vs.
THOMAS D. PEARCE, FRANK KURSH, and others.

I, Kenneth G. White, to whom it was referred by decretal order of court

dated April 21st, 1875, to take, state, and report the profits which have arisen or accrued to the defendants for or on account of the use by them of the invention described in the letters patent for the infringement of which this suit was brought, and also the damages which the complainants have sustained by reason of such infringement, do find and report as follows, viz:

1st. That no proof has been produced before me showing any profits made by the defendants from the use or infringement of the patent upon which this suit was brought, and in which suit the decree and order of reference was made.

2d. The proof has been produced before me showing what damages have been sustained by the complainants by the manufacture and sale by the defendants of the articles covered by the patent of complainants, and that such damages are the profits which the complainants would have made upon the manufacture and sale of the entire chains such as are shown in Exhibit 1, hereunto attached, and numbered, respectively, 1472, 1487, and 1567, and also shown in the photographs with like numbers which are hereunto attached, which chains the master finds to be covered by the first claim of complainants' patent.

140 3d. That the proofs show that the complainants have sustained damage by the manufacture and sale by the defendant of the other chains shown in Exhibit 1, and in the photographs hereunto attached, and designated respectively as 1566 and 1624, and that the extent or measure of such damage is the profit which the complainants would have made upon the open spiral links alone used in such chains, which links the master finds to be covered by the second claim of complainants' patent.

The damages I find and report are as follows, viz.:

On chains like No. 1472, profits which complainants would have made on entire chain	$107 90
On chains like No. 1487, profits which complainants would have made on entire chain	541 23
On chains like No. 1567, profits which complainants would have made on entire chain	260 22
On chains like No. 1566, profits which complainants would have made on spiral links alone in said chain	55 45
Ditto as to No. 1624	21 85
Total	$986 65

I find and report under the decree and order of reference that the damages sustained by the plaintiff are, as above stated, the sum of nine hundred and eighty-six dollars and sixty-five cents ($985.65).

All which is respectfully submitted.

Dated New York, July 28, 1876.

KENNETH G. WHITE,
Master, &c.

(Endorsed:) U. S. circuit court south. dist. of New York. In equity. Lewis J. Mulford et al. vs. Thomas D. Pearce et al. Master's report. Filed July 28, 1876.

141 *Exceptions on behalf of the defendant Thomas D. Pearce to the report of Kenneth G. White, esq., special master.—Filed July 28th, 1876.*

United States circuit court, southern district of New York. In equity.

LEWIS J. MULFORD ET AL.
vs.
THOMAS D. PEARCE ET AL.

Having submitted to the master objections to his draft report, and said objections having been overruled by the master, the defendant, Thomas D. Pearce, now takes to this honorable court exceptions to the report returned and filed by the said master in this cause under the decretal order of the court made herein and dated April 21st, 1875, said exceptions being submitted without argument (and otherwise) conformably with the stipulation in that behalf, a copy of which stipulation is hereto annexed.

Said exceptions are as follows, to wit:

To the following finding of said report, to wit:

"That proof has been produced before me showing what damages have been sustained by the complainants by the manufacture and sale by the defendants of the articles covered by the patent of complainants, and that such damages are the profits which the complainants would have made upon the manufacture and sale of the entire chains such as are shown in Exhibit 1 hereunto attached and numbered, respect-
142 ively, 1472, 1487, and 1567, and also shown in the photographs with like numbers, which are hereunto attached, which chains the master finds to be covered by the first claim of complainants' patent. That the proofs show that the complainants have sustained damage by the manufacture and sale by the defendants of the other chains shown in Exhibit 1 and in the photographs hereunto attached, and designated respectively as 1566 and 1624, and that the extent or measure of such damage is the profit which the complainants would have made upon the open spiral links alone used in such chains, which links the master finds to be covered by the second claim of complainants' patent.

"The damages I find and report are as follows:

"On chains like No. 1472, profits which complainants would have made on entire chain	$107 90
"On chains like No. 1487, profits which complainants would have made on entire chain	541 23
"On chains like No. 1567, profits which complainants would have made on entire chain	260 22
"On chains like No. 1566, profits which complainants would have made on spiral links alone in said chain	55 45
"Ditto as to No. 1624	21 85
"Total	$986 65

"I find and report under the decree and order of reference that the damages sustained by the plaintiffs are, as above stated, the sum of nine hundred and eighty-six dollars and sixty-five cents ($986.65)."

Defendant excepts, and respectfully submits to the court the following grounds of exception:

I.

The first claim of the patent is stated in the opinion of the court as follows:

"The first claim is not a claim for an ornamental chain composed of alternate closed links and open spiral links, without reference to
143 the material of which the spiral link is made, but it is a claim for a chain composed of alternate closed links and open spiral links formed of one or more coils of gold tubing, as shown and described."

Under this definition of the first claim, the right inquiry for the master, in pursuance of the order of reference, was (as to this claim), What damages have the complainants sustained by defendants' manufacture and sale of chains composed of alternate closed links and open spiral links formed of one or more coils of gold tubing, as shown and described.

The first branch of this inquiry leads to the fact that defendant had a right to make chains of alternate links, one solid and one of tubing, provided he soldered the tubing together so as to make it also a closed link. The point of infringement resided entirely in leaving the links of tubing unsoldered or open.

The question to be determined, therefore, was "What advantage did the defendant derive from using the complainants' invention—the open links—over what he had in using other links then open to the public, and adequate to enable him to obtain an equally beneficial result?"

The fruits of that advantage are his profits. They are all he derived from the existence of complainants' invention. (Mowry vs. Whitney, 14 Wall., 651.)

They are all complainants would have derived from the invention, and therefore they determine the damages accruing to them. Without specially citing the proofs in the case, the court is referred to its opinion in this case for the established fact that "ornamental gold chains, formed of alternate closed links and spiral links, or of spiral links alone, have long been known; chains composed of split rings, which are sprung into each other, or into a solid link, are familiar articles, and there can be no novelty in the mere shape of or form of the chain, or of the links, which is shown in the drawings of the patent. The distinctive feature of the invention does not consist in the fact that the link is spiral, but does consist in the construction of the open spiral link from a specified material, viz, gold tubing."

Upon the facts and the law it is manifest that the defendant
144 had a right to make his chains of alternate closed links and open spiral links, the spiral links being made of solid gold wire, and this leads to the inquiry—

Second. What advantage has defendant gained, or what damage have complainants suffered, by reason of the defendants having used open spiral links of gold tubing over what would have enured from the use of open spiral links of solid wire?

The complainant, Cottle, himself proves this to be only $1 per chain in the pattern 1487, even as between the link of spiral tubing left open and the same link soldered together, while in the other patterns he estimates it at 50 cents per chain on patterns of 1624, 1566, and 1567, and at $1.25 on the pattern 1472. He does not pretend to say it would be anything like that as between open spiral solid links and open spiral tubing links. But the testimony at most would only have warranted the master in finding the actual damages, proved to be $1.25, $1, and 50 cents per chain, that being all that is shown to be due to the patent, and

that being saved by the finishing of the links separately. (See his testimony before the master.)

The master therefore should have found that the damages proved as to the first claim of the patent were—

On	7	chains	of	pattern	1472	@	$1.25	per	chain	$8 75
"	79	"	"	"	1487	@	1.00	"	"	79 00
"	29	"	"	"	1566	@	.50	"	"	14 50
"	34	"	"	"	1567	@	.50	"	"	17 00
"	24	"	"	"	1624	@	.50	"	"	12 00
		Total								$131 25

instead of $986.65, and defendant submits that the court should amend the master's finding in this respect and to this effect.

II.

It was incumbent on the complainants to prove their actual dam-
145 ages, apportioning the profits on the unpatented parts of the thing patented so that the master could ascertain the actual profits or damages on the patented parts, and in default of such proof by complainants the master should have found only nominal damages. (The Goulds Manufacturing Co. vs. Cowing, 12 Blatch., 251, 252.)

The witness Cottle testified before the master that the complainants would have made net profits on chains, such as comprised in Exhibit 1, to the amount of $1,220.78, but on cross-examination, being asked, "In your estimate of the profits in your evidence in chief, how much do you assign to the open spiral link, or how much do you claim is due to the fact that the spiral link is open?" he says, "I made no estimate of profit assigned to the one or the other, but estimated both together."

Upon this it is submitted to the court that the defendant having a right, as is before stated, to make chains of alternate open and closed spiral links, the spirals being solid, it was not proper for the master to assign to the patent the profits on the entire chain, and even the entire profit on the spiral links of tubing is not assignable to the patent, but only the profit on the spiral links of tubing left open.

The witness Cottle only claims that the profit complainants would have made on the open spirals of tubing would have been:

On	pattern	1566,	$2.29	per	chain	on	29	chains		$66 41
"	"	1567,	2.29	"	"	"	34	"		77 86
"	"	1624,	1.32	"	"	"	24	"		31 68
		Total								$175 95

But this does not discriminate any profit due to the patent from the profit due to the entire manufacture, only a part of which is covered by the patent. If defendant had soldered the spiral links there would have been no infringement, and the question therefore is, what was gained by not soldering those links together?

It is respectfully submitted to the court that the "mere
146 guess" of the witness, Cottle, is not adequate proof upon which to base an award of damages, and that no apportionment of the profits having been made between the parts of the chain patented and those parts not patented, the master should have found either nominal dam-

ages only or else should have based his finding upon the only actual basis of calculation afforded by the evidence and stated under paragraph 1, to wit, $1.00, $1.25, and 50 cents per chain. and the defendant submits that the court should amend the master's finding accordingly. (Ransom vs. City of New York, 23 How., 487; Hitchcock vs. Tremaine, 9 Blatch., 389.)

III.

The witness, Cottle, having testified that complainants never made any chains of the patterns numbers 1567, 1566, or 1624, the master should not have found that they ever would have made such chains, and therefore should limit his finding of damages proven upon them to the saving of fifty cents per chain upon those patterns, and the defendant prays the court to amend the master's finding accordingly.

IV.

The witness, Cottle, having testified in the case in chief (Record, page 26, q. 71) that complainants nearly every day in December (1874) received orders which they could not fill, as they had not the goods for the orders, although they sold all they had on hand and all they could make without interfering with other goods, it is not proved that complainants would have made or sold the chains made and sold by defendant, or that they have suffered any damage or loss in that behalf by reason of defendant's sales; but on the contrary it is proved by this testimony that the only damage which complainants have sustained has been the advantage which defendant gained by the separate finishing of the open spiral links of tubing, to wit, $1.00, $1.25, and 50 cents respectively, upon the several patterns comprised in Exhibit 1.

147 And the court's attention is called to the inconsistency between the testimony of said Cottle, above referred to, and his answer before the master, that "we had orders in the month of December which we could not fill at the day they were ordered, for the reason that they would not wait for us to make them, and they could go in next door and get them without waiting for us." Whereas he had said in the original case, "we have sold all we had on hand and all we could make without interfering with other goods."

The defendant respectfully submits that this is not competent testimony upon which to base a finding, that the complainants would have made or sold the chains sold by defendant, or would have made the alleged profits thereon, and he prays the court to amend the master's finding in this respect accordingly.

V.

The evidence adduced before him did not warrant the master in finding and reporting under the decree and order of reference that the damages sustained by the complainants in the premises are nine hundred and eighty-six dollars and sixty-five cents, but, on the contrary, shows that the only actual damages proven are, as stated under paragraph 1, one hundred and thirty-one dollars and twenty-five cents ($131.25), to wit, $1.25 per chain on pattern 1472; $1.00 per chain on pattern 1487; 50 cents per chain on patterns 1566, 1567, and 1624. And defendant

prays the court to amend the master's finding in this respect accordingly.

All of which is respectfully submitted.

HENRY BALDWIN, JR.,
Solicitor and of Counsel for Defendant Thomas D. Pearce.

DECEMBER 14TH, 1876.

(Endorsed:) U. S. C. court, south. dist. N. Y. In equity. Mulford et al. vs. Pearce et al. Exceptions to master's report. Filed Dec. 14, 1876.

148 United States circuit court, southern district of New York. In equity.

LEWIS J. MULFORD ET AL.
vs.
THOMAS D. PEARCE ET AL.

It is hereby stipulated and agreed by the respective parties in the above entitled suit:

1st. That the defendant Pearce shall have until December 15th, 1876, to file as exceptions to the report of the master herein the exceptions which were filed with the master to his draft report.

2d. That the report and exceptions be submitted to Judge Nathaniel Shipman on or before December 20th, 1876, to be decided by him without argument from either side, unless he desires to hear argument, in which case the same shall be submitted on written arguments within ten days after said judge shall request such argument.

3d. That counsel for the defendants shall be notified of the decree entered upon the decision of Judge Shipman before complainants shall proceed further thereupon.

4th. The complainants may submit a motion to treble the damages at the time of the submission of said report and exceptions, and either party may present a written argument upon that question.

5th. The complainants shall be furnished with a copy of the papers to be submitted to Judge Shipman on or before December 18th, 1876.

6th. Upon the carrying out of this stipulation the final decree heretofore entered in this cause shall be vacated and annulled, and the decree made upon the decision to be made by Judge Shipman, as herein provided, shall be substituted in its place.

149 7th. If said decree is vacated, as aforesaid, the defendant shall pay to the plaintiff the clerk's fees incurred in entering and enrolling said decree and taxing costs.

8th. In case of an appeal to the Supreme Court by the defendant the supersedeas bond shall be filed and appeal taken within ten days after notice of the entry of the final decree to be entered upon Judge Shipman's decision.

9th. A copy of this stipulation shall be presented to Judge Shipman with the other papers.

TURNER, LEE AND MCCLURE,
Complainants' Solicitors.

HENRY BALDWIN, JR.,
Solicitor and of Counsel for Defendant Thos. D. Pearce.

NEW YORK, *December 9th*, 1876.

(Endorsed:) Filed Feb'y 27, 1877.

150 *Defendants' exceptions to the master's report, and plaintiffs' motion for increased damages.*

Circuit court of the United States for the southern district of New York.

LEWIS J. MULFORD ET AL.
vs.
THOMAS D. PEARCE ET AL.

SHIPMAN J.:

The defendants except to the master's report in regard to the amount of damages found to have been sustained by the plaintiffs by reason of the infringement of their patent.

The principal exception is stated in two forms, that inasmuch as the defendants had a right to make chains of alternate links, and to use tubing for one link, provided it was soldered, so as to make that link closed, the question to be determined by the master was—

1st. What advantage was derived by the defendants from using the open links over what they would have had in using closed links
151 made of tubing? or—

2nd. What advantage have the defendants gained by reason of having used open spiral links of gold tubing over what would have ensued from the use of open spiral links of solid wire?

The patented article was a new ornamental chain or necklace, a new article of manufacture, and the first claim has been held by this court to be a claim for a chain composed of alternate closed links and open spiral links formed of one or more coils of gold tubing (9 Official Gazette, p. 204). The distinctive feature of the invention, it was held, did not consist in the fact that the links was spiral, but did consist in the construction of the open spiral links from a specified material, viz, gold tubing.

The two elements of utility and novelty which the new article possesses are described in the opinion, in which it was shown that these elements did not exist either in a soldered chain of tubing which could not be taken apart, and which required finishing and polishing after
152 it was put together, or in a chain made of split gold rings of solid wire. It was said that the difference between the latter article and the patented chain was clearly marked, and was a difference in kind.

The patented and the unpatented articles are entirely distinct from each other. By the use of closed or soldered links of tubing, or links of solid wire, the manufacturer cannot obtain the result which is found in the patented invention, and therefore the principal which was decided in Mowry vs. Whitney, 14 Wall., 620, and which is invoked by the defendants, is not applicable,

That was a case of a new process of manufacture, and the court says that the proper inquiry was what was the advantage in bringing the article by the patented process to a state of perfection over bringing it to the same state by other processes, open to the public, and which would be equally beneficial.

153 In this case the links of a chain which are open to the public cannot from their nature make a chain which is like the patented article in its peculiar characteristics.

The master might as well undertake to estimate the advantage which

the patented article possesses over any other gold chains as over those which the defendants have selected.

The master seems to me to have observed in this case the rules which have heretofore been sanctioned by the circuit and supreme courts.

The cases of Burk v. Hermann (1 Blatchf. C. C. R., 398), Pitts v. Hall (2 Blatchf. C. C. R., 229), Cowing v. Rumsey (8 Blatchford C. C. R., 36), Livingston v. Jones (2 Fisher's Patent Cases, 207), Seymour v. McCormack (16 How., 480), are in point.

In regard to the motion for treble damages I do not perceive any adequate reason which calls upon the court to exercise its discretionary power to increase the actual damages.

154 The master's report is confirmed, and the exceptions are disallowed.

The motion to increase damages is denied.

Benjamin F. Lee for the plaintiffs; Henry Baldwin, jr., for the defendants.

(Endorsed:) Filed Feb'y 21st, 1877.

155 At a term of the circuit court of the United States of America for the second circuit and southern district of New York, held at New York on the twenty-sixth day of February, 1877:

Present, the honorable Nathaniel Shipman, judge.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL COTTLE, and SAMUEL P. BARKER
vs.
THOMAS D. PEARCE, IMPLEADED WITH OTHERS. } In equity.

This cause having been brought to a hearing upon the report of Kenneth G. White, esq., a master of this court, to whom it was referred to ascertain and take and state and report to the court an account of the gains, profits, and advantages which the defendant Thomas D. Pearce has received, or which have arisen or accrued to him since February 24, 1874, from infringing the exclusive rights of the said complainants as grantees of reissued letters patent No. 5774, dated February 24, 1874, granted to the complainants as assignees of Shubael Cottle for an

156 improvement in chains and chain-links for necklaces originally patented to said Shubael Cottle February 3, 1874, by the manufacture, use, and sale of the improvements patented therein, and also what damages in addition thereto the complainants have sustained by reason of said infringements, which report bearing date the 28th day of July, 1876, finds that no gains and profits have been proven to have been received by, or to have arisen or accrued to the defendant Thomas D. Pearce from the manufacture, use, or sale of the improvements patented in the reissued letters patent No. 5774, and that nine hundred and eighty-six $\frac{65}{100}$ dollars damages have been proven to have been sustained by the said complainants from the said infringements in violation of the exclusive rights secured to the complainants by the letters patent aforesaid, and upon the exceptions filed by the said defendant to said report, and said exceptions having been duly argued and overruled, now, on motion of Turner, Lee & McClure, complainants' solicitors, it is ordered, adjudged, and decreed that the said master's report be, and the same hereby is, in all respects confirmed; and

157 that the complainants recover of the defendant Thomas D. Pearce the sum of nine hundred and eighty-six $\frac{65}{100}$ dollars, the amount so reported due as aforesaid, with interest thereon from the 28th day of

July, 1876, the date of said report, amounting to the sum of thirty-six $\frac{48}{100}$ dollars, together with the costs of this suit, taxed at three hundred and twenty-two $\frac{09}{100}$ dollars, making in the aggregate the total amount of one thousand three hundred & forty-five $\frac{14}{100}$ ($1,345$\frac{14}{100}$) dollars, and that the complainants have execution therefor.

It is further ordered that the injunction heretofore issued herein against the defendant Thomas D. Pearce be made perpetual.

N. SHIPMAN, *Judge.*

(Endorsed:) U.S. circuit court, southern district of New York. Lewis J. Mulford et al. vs. Thomas D. Pearce, &c. Final decree. Filed M'ch 2, 1877.

158 United States circuit court, southern district of New York. In equity.

LEWIS J. MULFORD, SETH W. HALE, SHUbael Cottle, and Samuel P. Barker
against
THOMAS D. PEARCE, FRANK KURSH, AND FRANK Ferrale.

The defendant Thomas D. Pearce hereby appeals to the Supreme Court of the United States from the decree of the circuit court in this cause, and from the whole of said decree, because, as he alleges, the said decree is contrary to law, erroneous, and void; and he prays that a transcript of the bill, answer, depositions, and other proceedings in the cause be transmitted to the said Supreme Court, and that a citation to the complainants may be issued citing them to be and appear at said Supreme Court to be held at Washington on the 2nd Monday of October,
1877, to show cause, if any there be, why the decree appealed from
159 should not be corrected and reversed, and speedy justice should not bed one to the parties in that behalf.

Dated New York, March 12, 1877.

HENRY BALDWIN, JR.,
Sol'r and of Counsel for the Defendant Thomas D. Pearce.

160 (Indorsed:) U. S. circuit court, southern dist. of N. Y. Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker ag'st Thomas D. Pearce, Frank Kursh, and Frank Ferrale. Notice of appeal. Henry Baldwin, jr., sol'r for def't Thomas D. Pearce. E. & A. D., No. 3, p. 18. Filed M'ch 15, 1877.

161 United States circuit court, southern district of New York. In equity.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL Cottle, and Samuel P. Barker
against
THOMAS D. PEARCE, FRANK KURSH, AND Frank Ferrale.

The appeal of Thomas D. Pearce, appellant, one of the above named defendants, respectfully sheweth:

That on the 2nd day of April, 1874, the above named complainants filed their bill of complaint against the above-named defendants in the

circuit court of the United States for the southern district of New York.

That on the 6th day of July, 1874, the defendant Thomas D. Pearce duly answered the said bill of complaint, and on the 20th day of July, 1874, the complainants filed their replication.

That afterwards, and on April 21, 1875, a decretal order was made in said cause referring it to Kenneth G. White, esqr., to take, state,
162 and report the profits accrued to the defendants for or on account of the use by them of the invention described in the letters patent alleged to be infringed and the damages which the complainants sustained by reason of such.

That afterwards a report was made by said master, to which report exceptions were duly filed by the defendant Thomas D. Pearce, and a hearing was had on the said exceptions.

That afterwards, and on the second day of March, 1877, a final decree was made and entered in the said cause, wherein it was, among other things, adjudged that the said exceptions be overruled, and said report should be confirmed, and that the complainants recover of the defendant Thomas D. Pearce the sum of $\$1{,}345\frac{14}{100}$.

Wherefore, the said appellant Thomas D. Pearce appeals to the Supreme Court of the United States from the said final decree of the circuit court in this cause, and respectfully prays that the decrees of said court and the bill, answer, pleadings, depositions, evidence, and
163 proceedings in the said cause may be sent to the Supreme Court of the United States without delay, and that the said Supreme Court will proceed to hear the said cause and reverse the said decree of the said circuit court with costs.

Dated New York, March 12, 1877.

HENRY BALDWIN, JR.,
Sol'r for Thomas D. Pearce,
P'r E. LUTHER HAMILTON.

HENRY BALDWIN, JR.
of Counsel.

The foregoin' appeal is allowed.
March 14, 1877.

SAM'L BLATCHFORD.

164 (Indorsed:) United States circuit court, southern district of New York. Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker ag'st Thomas D. Pearce, Frank Kursh, and Frank Ferrale. Petition of appeal. Henry Baldwin, jr., sol'r for def't Thomas D. Pearce. Filed M'ch 15, 1877.

Due and timely service of a copy of the within petition is hereby admitted.
M'ch 15, 1877.

TURNER, LEE & McCLURE,
Sol'rs for Compl'ts.

165 *Bond for damages and costs.*

Circuit court of the United States of America, for southern district of New York, in the second circuit.

LEWIS J. MULFORD, SETH W. HALE, SHUBAEL Cottle, & Samuel P. Barker, complainants,
vs.
THOMAS D. PEARCE, IMPLEADED WITH OTHERS, defendants.

Know all men by these presents that we, Thomas D. Pearce, Augustus C. Taylor, and Samuel H. Sterret, the said Augustus C. Taylor residing at No. 15 West Forty-eighth street, in the city of New York, and said Samuel H. Sterret residing at No. 3 East Forty-seventh street, in said city, are held and firmly bound unto the above-named Lewis J. Mulford, Seth W. Hale, Shubael Cottle, & Samuel P. Barker, in the sum of twenty-eight hundred dollars, to be paid to the said Lewis J. Mulford, Seth W. Hale, Shubael Cottle, & Samuel P. Barker, for the payment of which, well and truly to be made, we bind ourselves, and each of us, our and each of our heirs, executors, and administrators, jointly and severally, firmly by these presents. Sealed with our seals, and dated the fourteenth day of March, in the year of our Lord one thousand eight hundred and seventy-seven.

Whereas the above-named Thomas D. Pearce has prosecuted an appeal to the Supreme Court of the United States, to reverse the decree rendered in the above-entitled suit by the judge of the circuit court of the United States for the southern district of New York:

Now, therefore, the condition of this obligation is such that if the above-named Thomas D. Pearce shall prosecute his said appeal to effect and answer all damages and costs if he fail to make his said appeal good, then this obligation shall be void; otherwise the same shall be and remain in full force and virtue.

THOMAS D. PEARCE. [L. S.]
AUGUSTUS C. TAYLOR. [L. S.]
SAM'L H. STERETT. [L. S.]

Sealed and delivered, and taken and acknowledged, this 14th day of March, 1877, before me.

JOHN A. SHIELDS,
U. S. Commissioner, S. D. of N. Y.

166 UNITED STATES OF AMERICA,
Southern District of New York, ss:

Augustus C. Taylor and Samuel H. Sterett, being duly sworn, doth depose and say, and each for himself saith, that he is worth the sum of twenty-eight hundred dollars over and above all his just debts and liabilities.

AUGUSTUS C. TAYLOR.
SAM'L H. STERETT.

Sworn to this fourteenth day of March, A. D. 1877, before me.

JOHN A. SHIELDS,
U. S. Commissioner, S. D. of N. Y.

The foregoing bond is approved as to form and amount, and the sufficiency of the sureties.

March 14, 1877. SAM'L BLATCHFORD.

(Indorsed:) Vol. , page . U. S. circuit court. Lewis J. Mulford et al. vs. Thomas D. Pearce, impleaded, &c. Copy bond for costs on Henry Baldwin, jr., def'ts' att'y. E. & A. D., No. 3, p. 18. Filed this 14 day of M'ch, 1877.

167 U. S. circuit court, southern district of New York.

LEWIS J. MULFORD ET AL.
vs.
THOMAS D. PEARCE ET ALS.

We hereby consent that the clerk of this court transmit with the record to the Supreme Court of the United States, the original exhibits on file in this case, the same to be returned to the files of this court after the disposal of the case in the Supreme Court of the United States.

May 18, 1877. HENRY BALDWIN, JR.,
For Def't Pearce.
TURNER, LEE & McCLURE,
For Compl'ts.

Ordered accordingly.

May 21, 1877. ALEX. S. JOHNSON,
Cir. Judge.

(Endorsed:) Filed May 21, 1877.

168 By the honorable Samuel Blatchford, one of the judges of the circuit court of the United States for the southern district of New York.

UNITED STATES OF AMERICA,
Southern District of New York, ss:

To Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker, greeting:

Whereas, from the whole of the decree lately made by the circuit court of the United States for the southern district of New York, in a certain cause wherein Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker were complainants, and Thomas D. Pearce, Frank O. Kursh, and Frank Ferrale were defendants, the said Thomas D. Pearce hath appealed to the Supreme Court of the United States, and hath filed his said appeal in the clerk's office of the said cir-
169 cuit court, at New York, and hath given good and sufficient security to prosecute his said appeal to effect, and answer all damages and costs:

Therefore you are hereby cited and admonished to be and appear at a Supreme Court of the United States, to be holden at Washington on the second Monday of October, 1877, pursuant to said appeal, to show cause, if any there be, why the decree so appealed from, as aforesaid, should not be corrected and reversed, and why speedy justice should not be done to the parties in that behalf.

. Witness the honorable Samuel Blatchford, a judge of said circuit court at the city of New York, this 14th day of March, 1877.

SAM'L BLATCHFORD.

(Endorsed:) U. S. circuit court, southern dist. of N. Y. Lewis J. Mulford et al. against Thomas D. Pearce et al. Citation on appeal. Henry Baldwin, jr., sol'r for def't Thomas D. Pearce.

Due and timely service of a copy of the within citation is hereby admitted.

M'ch 15, 1877.

TURNER, LEE & M'CLURE,
Sol'rs for Compl'nt.

Filed M'ch 15th, 1877.

170 UNITED STATES OF AMERICA,
Southern District of New York, ss:

I, John I. Davenport, clerk of the circuit court of the United States of America for the southern district of New York, in the second circuit, do hereby certify that the foregoing pages, numbered from one to 169, inclusive, contain a true and complete transcript of the record and proceedings had in said court in the case of Lewis J. Mulford, Seth W. Hale, Shubael Cottle, & Samuel P. Barker, complainants, against Thomas D. Pearce, impleaded, &c., with others, defendant, as the same remain of record and on file in said office.

In testimony whereof I have caused the seal of the said court to be hereunto affixed, at the city of New York, in the southern district of New York, in the second circuit, this 21st day of May, in the year of our Lord one thousand eight hundred and seventy-seven, and of the Independence of the United States the one hundred & first.

[SEAL.] JOHN I. DAVENPORT,
Clerk.

(Indorsement on cover:) No. 149. Thomas D. Pearce, appellant, vs. Lewis J. Mulford, Seth W. Hale, Shubael Cottle, and Samuel P. Barker. S. New York C. C. U. S. Filed 13 June, 1877.

OFFICE SUPREME COURT U. S.
FILED
OCT 15 1900
JAMES H. McKENNEY, Clerk.

Supreme Court of the United States.

No. 19.

THOMAS D. PEARCE,
Appellant,
vs.
LEWIS J. MULFORD,
SETH W. HALE,
SHUBAEL COTTLE,
AND
SAMUEL P. BARKER.

Appeal from the Circuit Court of the United States for the Southern District of New York.

Appellant's Brief.

HENRY BALDWIN, Jr.,
Counsel for Appellant.

Supreme Court of the United States.

No. 19.

THOMAS D. PEARCE,
APPELLANT,
vs.
LEWIS J. MULFORD,
SETH W. HALE,
SHUBAEL COTTLE, AND
SAMUEL P. BARKER.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

APPELLANT'S BRIEF.

I.

STATEMENT OF THE CASE.

The appellees, on the 21st April, 1874, filed their bill, in the Court below, against the appellant and others,c onstituting the firm of Pearce, Kursh & Company, charging infringement of reissued Letters Patent No. 5774, dated February 24th, 1874, and issued to Mulford, Hale & Cottle, assignees of said Cottle, for an alleged Improvement in Chains for Necklaces, &c.

Rec., pp. 1, 5.

The appellant alone was served, and duly appeared and filed an answer.

Rec., pp. 5, 9.

Replication was filed July 18th, 1874.

Rec., p. 9.

Testimony was taken on both sides, and the cause was heard, on pleadings and proofs, in April, 1875, by Hon. Nathaniel Shipman of Connecticut, holding the Circuit Court in New

York, who, on the 3d November, 1875, filed his opinion awarding a decree for an injunction, and referring the case to a Master, to take and state an account.

Rec., pp. 54, 58.

The Master, Kenneth G. White, Esq., heard the testimony adduced before him, and submitted to counsel for the parties his draft report, under date of May 23d, 1876.

Rec., pp. 64, 65.

To this draft report defendant excepted.

Rec., pp. 65, 69.

The Master filed his report July 28th, 1876.

Rec., pp. 69, 70.

The defendant filed exceptions to this report (Rec., pp. 71, 75) under stipulation (p. 75), and on the 21st February, 1877, Judge Shipman filed his opinion (Rec., pp. 76, 77), disallowing the defendant's exceptions and confirming the Master's report.

March 2d, 1877, a final decree was entered against the appellant for $\$986\frac{65}{100}$ damages and $\$36\frac{48}{100}$ interest, with $\$322\frac{09}{100}$ costs.

Rec., pp. 77, 78.

The defendant below appealed to this Court March 12th, 1877.

Rec., p. 79.

II.

THE QUESTIONS INVOLVED.

These comprise the issues, raised in the pleadings, as to the novelty and validity of the patent, and, in the exceptions taken to the Master's report, as to the measure of damages.

Amongst the issues raised in the pleadings are:

First. Want of novelty in the alleged invention.

Second. Want of patentable novelty in the alleged invention.

Third. Under the exceptions to the Master's report the appellant contends that the amount decreed, as damages, is excessive.

ASSIGNMENT OF ERRORS.

The Court below erred:

1st. In adjudging that the reissued Letters Patent No. 5774, dated February 24th, 1874, granted to Shubael Cottle, assigned to Mulford, Hale & Cottle, for an Improvement in Chains and Chain-Links for Necklaces, &c., originally patented February 3d, 1874, is a good and valid patent.

2d. In adjudging that said Cottle was the original and first inventor of the improvements described and claimed in said reissued Letters Patent No. 5774.

3d. In overruling the following exception, taken by defendant, to the Master's report:

1st. That the Master should have found that the damages proved as to the first claim of the patent were $\$131\frac{25}{100}$ instead of $\$986\frac{65}{100}$.

Rec., p. 73.

4th. In overruling the following exception, taken by defendant, to the Master's report:

2d. That no apportionment of the profits having been made between the parts of the chain patented and those parts not patented, the Master should have found either nominal damages only, or else should have based his finding upon the only actual basis of calculation afforded by the evidence, to wit: $\$1\frac{00}{100}$, $\$1\frac{25}{100}$, and 50 cents per chain.

Rec., pp. 73, 74.

5th. In overruling the following exception, taken by defendant, to the Master's report:

3d. That complainants never having made any chains of the patterns Nos. 1567, 1566, or 1624, the Master should not have found that they ever would have made such chains, and therefore should have limited his finding of damages proven upon

them to the saving of fifty cents per chain upon those patterns.

Rec., p. 74.

6th. In overruling the following exception, taken by defendant, to the Master's report:

4th. That the only damage which complainants have sustained has been the advantage which defendant gained by the separate finishing of the open spiral links of tubing, to wit: $\$1\frac{00}{100}$, $\$1\frac{25}{100}$, and 50 cents respectively.

Rec., p. 74.

7th. In overruling the following exception, taken by defendant, to the Master's report:

5th. That the only actual damages proven are $\$131\frac{25}{100}$, to wit: $\$1\frac{25}{100}$ per chain on pattern 1472, $1.00 per chain on pattern 1487, 50 cents per chain on patterns 1566, 1567, and 1624; and the evidence did not warrant the Master in finding that the damages sustained by the complainants in the premises are $\$986\frac{65}{100}$.

Rec., p. 74.

III.

BRIEF OF THE ARGUMENT.

The ~~applicant~~ appellant submits that said Cottle was not the original and first inventor of any substantial or material part of the thing patented in said reissued letters patent.

Answer. Rec., p. 7.

The claims of the patent are (p. 54):

1. An ornamental chain for necklaces, &c., formed of alternate closed links A and open spiral links B, substantially as shown and described.

2. The open spiral link B, formed of coils of tubing, substantially as shown and described.

The description of this open spiral link B is as follows (p. 54):

"The links B, which constitute the peculiar feature of my "invention, are formed of one or more coils of tubing, of the "proper length, so as to form a double spring link. Into each "end of the tube forming the link B is soldered a small shot, "as shown in the drawing, which shot gives a finish to the link. "The links B may then be colored or polished, and the chain "is formed by springing the links into each other."

Beyond this, the specification does not state how the links B are made.

The court below, in the decision of this case, said,—"The "testimony did not show that the plaintiff's invention of the "open spiral link from tubing, had been practically anticipated "by others" (p. 57).

It is respectfully submitted that this finding of the fact of novelty is a plain mistake.

The use of gold tubing in the manufacture of jewelry is proved as far back as 1857.

KURSH, pp. 44, 45.

Q. 4. How long have you been in the jewelry business in Philadelphia?

A. Eighteen years.

Q. 5. What part of the business do you have charge of?

A. Manufacturing.

Q. 6. How long have you known of the use of hollow tubing in jewelry?

A. As long as I have been engaged in the jewelry business.

Q. 7. How long have you known of the use of chains for necklaces?

A. As far back as I can remember.

Q. 8. Can you produce, to be used as exhibit in this cause, a tubular spiral?

A. I can.

[Witness produces a tubular spiral, and the same is marked Deft.'s Ex. F. J. A. S., Exr.]

Q. 9. What is Exhibit F a model of?

A. It is a model of ear-rings, pins, and chatelain pins, with the exception that the holes seen in the ends are closed up.

Q. 10. Did you ever make ear-rings, pins, and chatelain pins like the exhibit? and if so, when and where?

A. I have made them in Philadelphia, from 1857 to 1860.

Q. 11. Describe how the spiral, which forms part of the exhibit, was made.

A. A piece of gold plate is drawn through a draw-plate until the seam is nearly closed, with copper wire inside of it; it is then drawn through series of graduated holes until the gold and the copper unite together so as to make a solid wire; it is then mandreled into a spiral: it is then put into nitric acid to eat the copper out, so as to leave a hollow spiral; it is then either colored or polished.

Q. 12. What is a draw-plate?

A. It is a piece of steel with series of graduated holes.

Q. 13. Does the drawing through these holes curl the pieces of gold plate into a tube?

A. It does by the assistance of a small piece of wire.

Q. 14. In your experience as a manufacturing jeweller, have

you ever known of any other way in which a spiral can be made hollow?

A. I do not.

Q. 15. Can you bend a hollow tube into a spiral?

A. No, sir; not perfectly.

Q. 16. What will result if you bend a hollow tube around a mandrel?

A. It will not keep its shape; the seam will open, and the hollow wire will become mashed.

Q. 17. Look at the piece now shown you, marked Defendant's Exhibit G, and state whether it correctly represents a spiral, formed as you have described in your answer to question 11, before it is made hollow.

A. It does.

Q. 18. When did you first use the fluted wire of which Exhibit G is made, and for what purpose?

A. In 1869; for necklaces.

Q. 19. How did you make the links for those necklaces?

A. The same way as I described in my answer to question 11.

Q. 20. Were the links of these chains spirals?

A. It was a continuous spiral, cut into rings, double rings, or treble rings, which formed the spirals.

Q. 21. Were the single rings spirals?

A. No, sir.

Q. 22. How did they form a link?

A. By springing it into another link.

Q. 23. Did the two ends of the single ring meet each other?

A. They did.

Cross-examination (p. 46).

× *Q.* 51. How were the links, spoken of in your 20th answer, closed together so as to form rings single, double, or treble?

A. Every other ring was soldered together, partly finished, and then sprung, with the intermediate link, together, and closed by soldering the ends of the intermediate link together.

× *Q.* 52. This made, of course, a continuous closed chain?
A. Yes, sir.

Re-direct (p. 47).

Q. 56. In your description of the process of making the tubular spiral, you stated that after the wire was mandreled into a spiral the copper was eaten out by acids. Was this done before the spiral was cut into lengths such as you wished to use?

A. It was done after it was cut into lengths.

Again (pages 45–47) he says:

Q. 35. Do you know what a serpentine bracelet is? If so, describe it.

A. What do you call serpentine?

Q. 36. A bracelet made of a coil to spring over the wrists.

A. We call them serpents.

Q. 37. Have you ever made any?

A. I have.

Q. 38. How long ago?

A. In 1871; in Philadelphia.

Q. 39. Were they tubular?

A. Yes, sir.

Q. 40. Were they made by a process similar to the one which you have already described for making a spiral link?

A. Yes, sir.

Cross-examined by B. F. Lee, Esq.

× *Q.* 41. The serpent bracelets of which you have spoken were hinged, were they not?

A. No, sir.

× *Q.* 42. Describe exactly how they were made so that they would expand or open so as to allow the passage of a hand through them or allow the wrist to be placed in them.

A. The bracelet I speak of, of a spiral tubing, slipped over the hand to be worn on the thick part of the arm.

× *Q.* 43. How many such did you make?

A. One, as near as I can remember; one I'm sure of.

× *Q.* 44. Was that composed of continuous tubing?

A. It was a spiral link, double on one side, the two ends showing on the other.

Q. 57. Did your firm sell the serpent bracelet which you made in 1871?

A. Yes, sir.

Q. 58. What did you mean in your description of that bracelet when you said it was a spiral link, double on one side, the two ends showing on the other?

A. It presented the same appearance as the spiral ring we made September 24, 1873, and showing one ring and two ends on one side, and a double ring on the other.

Re-cross.

× *Q.* 59. For whom was that serpent bracelet made?

A. It was made for Tiffany & Co., at that time, 1871, as near as I can remember.

× *Q.* 60. How thick was the tubing? Give its diameter.

A. Diameter was a quarter of an inch, as near as I can remember.

× *Q.* 61. Was it circular tubing?

A. It was a circular tubing.

× *Q.* 62. And it consisted of nothing but tubing, without spring or hinge or other device?

A. Yes, sir.

× *Q.* 63. Do you know for whose wear it was made, or to whom it was sold to be used?

A. No, sir.

× *Q.* 64. How much would it expand and contract in diameter across the bracelet in either the long or short direction?

A. I did not try it, therefore I can't tell how much.

In this serpent bracelet, then, we have an open spiral link formed of gold tubing, made by a similar process and presenting the same appearance as the spiral rings made by him in September, 1873, and presenting to the eye the precise appearance of the drawing attached to the complainant's patent.

P. 47, A, 58.

P. 46, ××qq. 45, 47.
Deft.'s Exhibit H, q. 54, p. 47.

This open spiral of gold tubing was made and sold in 1871, while complainant did not assert any earlier date for his alleged invention than July, 1873.
P. 11, qq. 5, 6.

The complainant Cottle disclaimed having invented the spiral link of gold tubing. COTTLE (p. 24.)
× *Q.* 84. What is tubing, in the sense of your patent, reissue 5774?
A. I should describe it the same as Mr. Kursh described it.
× *Q.* 85. Favor me with your description of it.
A. It is a strip of gold drawn through a draw-plate until the edges come together, with a brass or copper wire inside; then the brass or copper wire inside is there for the purpose of keeping the tubing from bending in while in the process of winding into coils.

P. 25.
× *Q.* 94. Isn't defendant's Exhibit G a fair sample of the tubing you have described, formed on the wire?
A. It is.
× *Q.* 95. And are not your spiral links, in the Patent 5774, made like defendant's Exhibit G, and cut at the proper points, according to the number of coils you wish each link to have?
A. So far as Exhibit G goes it is the same, but it is only the first stages of the process.
× *Q.* 96. Don't you sometimes have more than two coils in one of your links?
A. I do.
× *Q.* 97. Now, when Exhibit G is divided into links, are those links formed of coils of tubing, as described in your Patent 5774?
A. They are; but they cannot be colored until the brass wire is taken out.
× *Q.* 98. How long have you known tubing to be drawn

over wire, as you have described, and used in jewelry in one form or another?

A. As long as I have known anything about the manufacture of jewelry,—you might say sixteen years: I don't remember the exact date.

× *Q.* 99. You don't claim to have invented that, do you?

A. No, sir.

× *Q.* 100. How long have you known the wire to be eaten out, so as to leave the tubing hollow, after it had been shaped into the desired form?

A. Ever since I have known anything about the manufacture.

× *Q.* 101. You don't claim to have invented that, do you?

A. No, sir.

× *Q.* 102. How long have you known of shot being put into the ends of links formed of hollow tubing?

A. For a great many years,—I couldn't say how long.

× *Q.* 103. You don't claim to have invented that, do you?

A. No, sir.

× *Q.* 104. How long have you known of links formed of hollow tubing, with shotted ends, substantially such as defendant's Exhibit C, and defendant's Exhibit I?

A. I could not say just how long, but for a number of years.

× *Q.* 105. Isn't defendant's Exhibit C formed of coils of such tubing as you have described?

A. Yes.

× *Q.* 106. Before the links in Exhibit C were put together, wasn't each of them an open spiral link formed of coils of tubing substantially such as the link B described in the reissue 5774, except the finish?

A. The difference is, that the coils in Exhibit C are spread apart or open, and the coils of the link B in the patent are closed together, not spread open, thereby making a spring link.

Defendant's Exhibits C, D, and I are coils of gold tubing made and used as chain links in 1871 and 1872.

AIGUIER, p. 33, A A 19, 22; p. 34, A A 51, 53.
PETERSON, p. 35, A A 1, 10.

CHATELLIER, p. 48, A A 2, 8.

In view of this uncontradicted evidence, and of these admissions by the patentee, it is clear beyond any doubt that the open spiral link made of one or more coils of gold tubing was known and used by jewellers long prior to Cottle's alleged invention, and it is submitted that the court below erred in not finding the second claim of the patent void for want of novelty.

COTTLE'S FIRST CLAIM.

"An ornamental chain for necklaces, &c., formed of alternate "closed links, A, and open spiral links, B, substantially as "shown and described."

1. The proofs show the following state of the art prior to Cottle's alleged invention.

Chains having alternate open and closed links, the open links being spiral, and being sprung into other links to form the chain.

Defendant's Exhibit A.

Spiral rings or links open at the ends were used for guard-chains, to jump into necklaces, and for other purposes.

Aiguier, p. 32.

Chains made of spiral links.

Defendant's Exhibits B, E, N.

Chains composed of open spiral links.

Defendant's Exhibits C, D.

These links being made of tubing and afterwards soldered together.

Aiguier, p. 33.

Hollow tubing and tubular spirals.

Defendant's Exhibits F, G.

A bracelet consisting of an open spiral link formed of coils of tubing.

Kursh, p. 46.

Chains for necklaces composed of coils or coiled links of hollow tubing.

Defendant's Exhibit I (pattern).

Chatellier, p. 48.

Chains, necklaces, and watch-chains of tortoise-shell and vulcanite, consisting of alternate closed links and open links sprung together, and without any fastening for the open links.

Defendant's Exhibits I, J, Rec., p. 48.

In addition to the evidence already quoted see the following testimony.

AIGUIER. (Rec., pp. 32, 33.) In the jewelry business over thirty-seven years. From 1838 to 1846 was in the employ of Downing & Baldwin, in Reade Street, New York. While in their employ made chains consisting of alternate open and closed links, the open links being spiral. These chains were on sale by said firm.

Q. 8. Describe the way in which you made them.

A. We drew down square wire, and wound on a round mandrel, and then cut off into pieces as we wished them.

Q. 9. Which link did this form?

A. The round spiral link.

Q. 10. What did you do then with the links?

A. Made punchers to punch them flat.

Q. 11. The links being thus formed, what was the next stage?

A. File and finish them up and polish them.

Q. 12. How did you make the links, thus finished, into a chain?

A. By springing them into another link.

Q. 13. Can you produce, to be used as an exhibit in this case, a model which correctly represents the chain so made by you during the period you were in their employ?

A. I can, and do so.

[The chain produced by witness offered in evidence, and the same is marked Deft.'s Ex. A. J. A. S., Exr.]

Q. 14. Did you use spiral rings or links open at the ends for other purposes during the period referred to?

A. Yes, sir; I used them for guard-chains, to jump into necklaces, and for other purposes.

Q. 15. Since Mr. Downing's death have you made chains consisting of spiral links? and if so, at what time?

A. I made a chain with spiral links in 1868 or 1869.

Q. 16. For whom did you make them, and where?

A. For M. G. Baldwin and Augustus W. Sexton, corner of Broadway and Maiden Lane, N. Y.

Q. 17. Can you produce a model of such chain?

A. I can.

[Witness produces model, and the same is marked Deft.'s Ex. B. J. A. S., Exr.]

Q. 18. In whose employ are you now, and for how long have you been so?

A. Moses G. Baldwin, Augustus W. Sexton, and Richard N. Peterson, in New York. I have been in their employ for five years, about.

Q. 19. Have you made for them any chain composed of open spiral links? and when? and if yes, produce a model of such chain.

A. I produce a model of such chain as made by us about September, 1872.

[The model referred to by witness offered in evidence, and marked Deft.'s Ex. C. J. A. S., Exr.]

Q. 20. Where did this pattern come from?

A. From Germany.

Q. 21. Who brought it to this country? and when did he bring it?

A. Mr. Peterson brought it, in July, 1872.

Q. 22. Were these links hollow or solid?

A. They were made solid, with copper wire in the inside; then the copper is destroyed, and leaves a hollow link.

Before the links of which Exhibit C is made are put together they are open.

Deft.'s Exhibit D is such a link.

These links are sprung together; that makes a chain.

Pp. 34, 35.

PETERSON. (Rec., pp. 35, 36.) In the jewelry business since 1846. Made chains like defendant's Exhibit A in 1848 and 1850, and saw them for years afterwards. They were commonly known to the trade as early as 1850.

Defendant's Exhibit B is a pattern of chains sold as long ago as 1865 in New York.

Saw a chain like defendant's Exhibit C in the early part of 1872. Saw it worn and for sale in the stores. Purchased such a chain in Germany in 1872. Commenced to manufacture it immediately on his return, in the latter part of July, in New York, and put them on the market at once.

The early chains, like defendant's Exhibit B, were not soldered, but, finding a tendency to pull out, they afterwards soldered them (p. 37).

The form of link in Cottle's patent is liable to open: we have had them to do so.

Q. 42, p. 37.

CHATELLIER, pp. 38, 39.

In the jewelry business in New York since 1843.

Q. 4. Have you ever seen a chain composed of alternate open and closed links, the open links being spiral?

A. Yes, sir.

Q. 5. When and where do you recollect to have first seen such chain?

A. I couldn't tell positively where I first saw one, or when, but I certainly have seen them twenty years. The first I remember of ever having seen such a thing was in a fob-chain.

[Exhibit A shown witness.]

Q. 6. Have you ever seen a chain like Exhibit A? If so, when can you state that you have seen it?

A. I have seen chains like this exhibit,—plenty of them; but I couldn't fix any date. I will simply say that the first that I saw one like this was a great while ago.

Q. 7. Was it before the commencement of the war?

A. Yes, sir.

Q. 8. Did you see them in New York?

A. Yes, sir.

[Exhibit B shown to witness.]

Q. 9. Has your firm ever sold chains like Exhibit B?

A. Yes, sir.

Q. 10. When and where?

A. In this city, within five years.

Q. 11. Was it as long ago as five years?

A. The first one was; the last was about two years.

[Witness is testifying September 24th, 1874. Rec., p. 38.]

Q. 12. Have you any in stock now?

A. Yes, sir.

Q. 13. Have such chains been commonly known in the trade? and if so, how long do you recollect them to be so?

A. I think about five or six years.

Q. 14. Do you know of any other style of chain having the same general construction?

A. Yes.

Q. 15. Have you in your possession such a chain?

A. I have.

[Witness produces a piece of chain, and the same is marked Deft.'s Ex. E. J. A. S., Exr.]

Q. 16. To whom did the chain, of which that is a piece, belong?

A. It belonged to William Aikens, of New Jersey, who is now dead.

Q. 17. How long ago did he die?

A. To the best of my recollection, about fifteen years; I couldn't give the exact date now.

Q. 18. Did you ever see him wear it in New York?

A. I couldn't swear that I did; he wore that generally as a watch-chain.

Q. 19. Have you ever worn it? and when and where?

A. I have worn it as a watch-chain within fifteen years, in New York.

Swears positively that the chains like Exhibit A had not the split link fastened together by solder or otherwise.

× Q. 26, p. 39.

PEARCE. (Rec., p. 45.) (Appellant.) Jeweller. In the business

for twenty years. Hildeburn, of Philadelphia, before 1860, sold split rings,—the round ring in Exhibit A is a split ring. They also sold chains composed of alternate open and closed links, the open links being spiral. Some of those chains were like Exhibit A in construction.

CHATELLIER recalled (pp. 47, 48).

His firm made and sold chains for necklaces composed of coils or coiled links of hollow tubing,—they were offered for sale August 22d, 1871. Defendant's Exhibit I is a pattern representing those chains. The exhibit is solid, as patterns are never made hollow.

(Rec., p. 48.)

ISAAC DIXON, having been duly affirmed, deposes and says: I am fifty-six years of age, and reside at said city of Philadelphia; I have been for the past forty-one years, and am now, engaged in the jewelry business in said city, and am familiar with ornamental chains of tortoise-shell and vulcanite, having dealt therein for ten years past. During the whole of that period, chains, necklaces, and watch-chains of tortoise-shell and vulcanite, consisting of alternate closed links and open links, sprung together and without any fastening for the open links, have been well known to me as a common article of manufacture, and I have for that length of time sold them at said city of Philadelphia. The same are, and always have been during my said knowledge of them, made by finishing each link separately and then springing them together. I have examined two chains, the one of tortoise-shell, and marked "Deft.'s Ex. J. J. A. S., Exr.;" and the other of vulcanite, and marked "Deft.'s Ex. J^{r}. J. A. S., Exr.;" and find the same to be of the construction above described, consisting of open links and closed links, which have been separately finished and then sprung together, and such as I have sold for the last ten years, as above stated. And further saith not.

The serpent bracelet made by Kursh and sold to Tiffany & Co. in 1871, was an open spiral link, formed of coils of gold

tubing, substantially as shown and described in the reissued patent, and as specified in the second claim thereof.

There could be nothing patentable in reducing the size of this link so that it would form one link in a necklace, as our laws do not recognize patentable novelty in the mere enlargement or reduction of the scale upon which a device is constructed, without any other change in its construction to adapt it to its simple double use.

Phillips *vs.* Page, 24 How., 167.
Glue Co. *vs.* Upton, 97 U. S., 6.
Rubber Coated Co. *vs.* Welling, 97 U. S., 12.
Dalton *vs.* Jennings, 93 U. S., 272.

It is respectfully submitted that the court below erred in not finding the first claim of the patent void for want of novelty.

The only remaining feature of novelty in Cottle's necklace shown and described in the reissued patent is that after he has sprung together the closed links and the open spiral links of tubing he has left them open or unfastened, just as the split rings of Exhibit A, or the open links of Exhibits I, J, were left.

Appellant submits that there is no patentable novelty in making up a chain by putting together one kind of open link and any kind of closed link, such open links being made of gold tubing, when chains had been made up by putting together other kinds of open links and other kinds of closed links, such links being made of gold, tortoise-shell, and vulcanite.

Chains composed of alternate open and closed links being old, there could be nothing patentable in taking such chains apart so as to make them longer or shorter.

The open spiral link of tubing being old, there could be nothing patentable in the inherent elasticity of such a link which permitted it to be readily sprung into a closed link, as

has been done with the spiral links of solid wire, the split rings of Exhibit A, or with the tortoise-shell or vulcanite links.

The way in which the inherent elasticity of the open spiral link of tubing is availed of differs in nothing from the way in which the elasticity of the split ring, or of the tortoise-shell link, or of the vulcanite link is availed of.

Rubber Tip Pencil Co. *vs.* Howard, 20 Wall., 498.

Cottle invented neither the tubing nor the open spiral link made of tubing, nor the process of making the open spiral link, nor the closed link, and is not entitled to a patent for making up a chain of such links.

Collar Co. *vs.* Van Dusen, 23 Wall., 563.

It is respectfully submitted that the court below erred in not finding the patent void for want of patentable novelty.

THE DAMAGES.

The rule adopted by the Master and approved by the Court below, of estimating the complainants' damages by the profits they *would* have made on the *whole* chains which were sold by the defendants, is not applicable to the present case.

The complainant's case is devolved entirely upon the patentee complainant Cottle, who is the single witness examined by them either before the Examiner or before the Master, except the complainant Hale, who proves merely a date at which his firm sold the Cottle chains.

Cottle says that the split rings are finished separately and completely (p. 17. A. 27), as the open spiral rings of tubing are. This being so, the only difference between the split rings and the open spirals of tubing is the difference in their elasticity and in the effect of the stiffer split ring upon the polished surface of the closed links, this difference, as complainant contends, necessitating a refinishing of the chain composed of split rings and closed rings, or of spirals that are soldered together. This is the only saving in cost due to the peculiar method described in the patent (p. 60).

It was plainly contrary to the recognized rules in such cases for the Master to find the actual damages upon the chains sold by the defendant, at

$15.41 per chain on Pattern 1472.
6.85 " " " " 1487.
7.65 " " " " 1567.
1.91 " " " " 1566.
.91 " " " " 1624.

The appellant refers to the Record, pp. 71, 75, for the grounds of his exceptions to the findings of the Master, based upon the application of this Rule of Damages.

Even if this Rule of Damages, to wit, the profits which the complainant *might* have made on the *whole* article, be applicable in the present case, the Master did not apply it properly and correctly.

Whenever the rule of the profits which the complainant could have made is adopted, the obligation rests on the complainant to show that he could have supplied the articles sold by the defendant, and that the defendant's infringement prevented the complainant from making such sales.

Goodyear *vs.* Bishop, 2 Fisher, 154.

Magic Ruffle Co. *vs.* Douglas, 2 Fisher, 330.

In the present case there is no evidence whatever that the complainants would have made the sales made by the defendant. There is no evidence that they could have supplied the demand for more chains than they actually sold. On the contrary the complainant Cottle *swears* in January, 1875 (Record, p. 22), "we made and sold from first February, 1874, up to the time* "Mr. Hale gave his testimony about six hundred chains; valu- "ation about twenty-five thousand dollars. Since then we have "sold *all we had on hand*, and all we could make *without inter-* "*fering with other goods;* and we have received orders nearly "every day in the month of December *which we could not fill*, "as we had not the goods for the orders."

It affirmatively appears, then, that the complainant could not have made the chains which the defendant sold, and the damages he has suffered are therefore merely nominal, as the court below has found that the defendants made no profit out of their infringement.

The decree below should be reversed.

HENRY BALDWIN, JR.,

Counsel for Appellant.

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* Oct. 30, 1874.

Supreme Court of the United States,

OCTOBER TERM, 1879. No. 149.

THOMAS D. PEARCE,
Appellant,

vs.

LEWIS J. MULFORD, et al.

BRIEF for APPELLEES.

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OCTOBER TERM—1879. No. 149.

THOMAS D. PEARCE,
Appellant,
vs.
LEWIS J. MULFORD, SETH W. HALE, SHUBAEL COTTLE, and SAMUEL P. BARKER.

Appeal from the Circuit Court of the United States for the Southern District of New York.

Brief for Appellees.

This is an appeal from a decree in equity, rendered in favor of complainants, by the Circuit Court of the United States for the Southern District of New York, on the second day of March, 1877, in a suit brought by Lewis J. Mulford, and others, against Thomas D. Pearce, and others, on Reissued Letters Patent granted to Mulford, Hale & Cottle, assignees of Shubael Cottle, for "improvement in chains and chain links for necklaces, &c.," bearing date February 24th, 1874, and numbered Reissue 5,774 (Complainants' Exhibit B, p. 52).

The original letters patent were granted to complainants for said improvement, and bore date February 3, 1874 (Complainants' Exhibit A, p. 49).

Complainants' Exhibit No. 1 is a gold chain such as is described in said Letters Patent (p. 11.).

The bill was filed April 2, 1874, against the defendants, for infringement of said Reissue No. 5,774, and prays for an injunction, discovery, account and assessment of damages.

The defendant Pearce was alone served with process, and he only appeared and answered the bill.

The answer admits the use of the thing patented, and sets up the following defences (Answer, p. 7):

I.—That the invention patented is not legally the subject of letters patent.

II.—That the specification filed by the patentee in the Patent Office was made to contain less than the whole truth relative to his invention, and does not describe the manner and process of constructing it with the exactness required by law.

III.—That the invention is not new.

The usual interlocutory decree was rendered by the Court on the 21st day of April, 1875, with reference to a Master to ascertain the profits and damages (p. 57).

The opinion of the Court upon which this decree was based will be found on p. 54 of the record.

The Master made his report that no proof as to profits had been adduced to him and awarding damages to the amount of $986.65 (p. 69).

To this Report the defendant filed exceptions, hereinafter specifically referred to (p. 71).

These exceptions were argued and overruled, and the final decree entered for said damages and for costs, from which this appeal is taken (p. 77).

The following is the appellants' assignment of errors:

Assignment of Errors.

The Court below erred :

1st. In adjudging that the reissued Letters Patent No. 5774, dated February 24th, 1874, granted to Shubael Cottle, assigned to Mulford, Hale & Cottle, for an Improvement in Chains and Chain-Links for Necklaces, &c., originally patented February 3d, 1874, is a good and valid patent.

2d. In adjudging that said Cottle was the original and first inventor of the improvements described and claimed in said reissued Letters Patent No. 5774.

3d. In decreeing that complainants (appellees) do recover of this defendant (appellant) the profit, gains and advantages which said defendant has received, or which have arisen or accrued to him from said infringement of said patent, by the manufacture, use, or sale of the improvements described and secured by the reissued Letters Patent No. 5774 since February 24th, 1874, and also such damages in addition to said profits as complainants may have sustained by reason of said infringements.

4th. In overruling the following exceptions, taken by defendant, to Master's report :

1st. That the Master should have found that the damages proved as to the first claim of the patent were $\$131\frac{25}{100}$ instead of $\$986\frac{65}{100}$.

2d. That no apportionment of the profits having been made between the parts of the chain patented and those parts not patented, the Master should have found either nominal damages only, or else should have based his finding upon the only actual basis of calculation afforded by the evidence, to wit : $\$1\frac{00}{000}$, $\$1\frac{25}{000}$, and 50 cts. per chain.

3d. That complainants never having made any chains of the patterns Nos. 1567, 1566, or 1624, the Master should not have found that they ever would have made such chains, and therefore should have

limited his finding of damages proven upon them to the saving of fifty cents per chain upon those patterns.

4th. That the only damage which complainants have sustained has been the advantage which defendant gained by the separate finishing of the open-spiral links of tubing, to wit: $\$1_{100}^{00}$, 1_{100}^{20}, and 50 cents respectively.

5th. That the only actual damages proven are 131_{100}^{25}, to wit: $\$1_{100}^{25}$ per chain on pattern 1472, $1.00 per chain on pattern 1487, 50 cents per chain on pattern 1566, 1567, and 1624; and the evidence did not warrant the Master in finding that the damages sustained by the complainants in the premises are $\$986_{100}^{65}$.

First.

We will first consider the defenses touching the validity of the patent.

I.

AS TO THE FIRST DEFENSE SET UP IN THE ANSWER, THAT THE SUBJECT MATTER OF THE INVENTION IS NOT LEGALLY THE SUBJECT OF LETTERS PATENT.

The patent has two claims (p. 54):

"1. An ornamental chain for necklaces, &c., formed of alternate closed links A and open spiral links B, substantially as shown and described."

"2. The open spiral link B, formed of coils of tubing, substantially as shown and described."

What is known as "tubing" in the jeweller's art is made by drawing a strip of gold through a draw-plate around a copper or brass wire in such a manner as to completely encase or surround the copper

or brass wire. The copper or brass wire is then eaten out by immersion in acids, leaving the hollow gold tubing (pp. 20, 24, 44).

A coil of this tubing possesses a peculiar and delicate elasticity not affected by annealing (pp. 14, 16, 18, 26).

Cottle conceived the idea that this elasticity possessed by coils of tubing could be utilized in the manufacture of chains, so as not only to greatly facilitate and cheapen the process of manufacture, but also to produce an article which, in the hands of the wearer, would be capable of many uses to which chains constructed in the ordinary manner could not be put.

This he accomplished by forming tubing into a spiral link, and constructing a chain, as described in the specification of his patent, and shown in the specimen complainant's Exhibit No. 1.

By this contrivance he produced the following new and useful results:

1. The manufacture of the chain itself was greatly cheapened. Gold chains constructed in any other manner are necessarily colored or polished and finished after the links are fastened together, which is a difficult and laborious process, and prevents the proper polishing of certain portions of the links; while by Cottle's construction the links may be made and finished separately in quantities, and more perfectly and readily polished or colored and finished. This is an item of great importance in the manufacture, as thereby a saving in labor of at least fifty per cent. is effected (pp. 14, 15, 22, 27, 28).

2. The chain is far more useful in the hands of the wearer than any other, as the links can be separated and reunited at pleasure, the delicate elasticity of the spiral spring links, composed of coils of tubing, preventing any injury to the chain, and at the same time causing the links to assume and retain their original shape. The various uses to which this peculiar construction enables the chain

to be put are described in the testimony of the inventor (pp. 14, 15).

The value and importance of this invention are shown by the large sales of the article by the complainants during a period peculiarly unfavorable for the sale of articles of this character (pp. 11, 22, 23.)

Cottle having accomplished in the manufacture of gold chains a new and useful result, an increase of efficiency, and a decided saving in the operation, was clearly entitled to a patent.

Smith *v.* Goodyear Dental Vulcanite Co., 3 Otto, 486.
Gayler *v.* Wilder, 10 How., 477, 3rd exception, p. 484.
Goodyear Dental Vulcanite Co. *v.* Willis, 7 Pat. Off. Gaz., page 41.
Strong *v.* Noble, 3 Fish, Pat. Cases, p. 586.
Curtiss on Pat., 4th Ed., Prel. Obs., p. xxx.
Walton *v.* Potter, 3 Manning & Granger, p. 438.
Rich *v.* Lippincott, 2 Fish. Pat. Cases, p. 4.
Dalton *v.* Nelson 9 Off. Gaz., 1,112.

The portion of the opinion of the Court below which treats of this subject is clear and to the point, and we therefore quote it. After explaining the state of the art and the mode of making the patented chain, the Court says, (p. 56:)

"The discovery which led to the invention consisted in the discovery of the fact that links made of tubing possessed a peculiar elasticity which was unaffected by the annealing. The invention was the application of this discovery to the production of a new and useful result, namely, the manufacture from tubing of ornamental chains which possess the following elements of novelty and utility; First—All the links can be completely finished and then put together without injury to the chain, and thereby the article can be produced at a much less expense than had previously been necessary. Gold chains which are constructed in any other manner must be finished or polished, or colored after the chain is completely formed, which is a difficult and somewhat

expensive part of the manufacture, while, inasmuch as their links are sufficiently elastic to be united together or sprung upon a solid link without injury to any part of the chain, the separate links can be made in quantities, and completely finished and polished before being united. Second—The elasticity of the spiral links is such that the chain can easily be separated by the fingers of the owner, and united in different forms and for different purposes, and reunited in the original chain, without detriment to the polish of the links, and with no loss of their elasticity. As has already been suggested, these features of novelty and utility do not result from the fact that the chain is made in part from a spiral link but from the fact that the spiral link is manufactured from a material which possesses a peculiar quality of permament elasticity. The invention consists in the fact, that whether the inventor was or was not the first person to discover the peculiarity, he first utilized the discovery, and applied the peculiar property of the material to a useful result in the manufacture of chains."

II.

AS TO THE DEFENSE THAT THE SPECIFICATION WAS MADE TO CONTAIN LESS THAN THE WHOLE TRUTH RELATIVE TO THE INVENTION, AND DOES NOT DESCRIBE THE MANNER AND PROCESS OF CONSTRUCTING IT WITH THE EXACTNESS REQUIRED BY LAW.

The art of making and coiling tubing filled with brass or copper wire around a mandrel, was well known to jewelers prior to the patentee's invention, and links of the shape of defendants' Exs. C, D, and I, had been made of such coils of tubing by cutting off from the coil pieces of the required size, eating out the brass or copper wire, and then annealing them to the desired shape (Answer, p. 8, also pp. 44, 45, 20, 25, 26, 28, 29).

It was not necessary, therefore, for the specification to describe the method of making jewelers' tubing, or how to coil the tubing, or how to anneal it into the proper shape to answer the purposes of the invention. The specification, therefore, describes the invention "in such full, clear, concise

and exact terms as to enable any person skilled in the art," to construct and use it.

In overruling this defense, the Court below said (p. 57):

"It was also suggested by the defendants that the specification does not describe the process of manufacture of the spiral link with the exactness which is requisite. The manner in which gold tubing is manufactured is well known to all persons skilled in the art. After having been compressed around copper wire it is wound upon a mandrel; the wire is then removed by acid and the coil of tubing, having been secured with wire, is annealed into the proper shape. This process is thoroughly understood by the manufacturing jeweler. It would have been a waste of words to explain the method of manufacture to a class of persons who are sufficiently informed when they are told that the link is 'formed of one or more coils of tubing of the proper length, so as to form a double spring link.'"

III.

AS TO THE DEFENSE THAT THE INVENTION IS NOT NEW.

1. The alleged prior knowledge of Aiguier.

John B. Aiguier made chains like Ex. A, prior to 1845. He made Ex. A a month or two prior to his examination; he had made no others since 1845, although he had been continuously engaged in the jewelry business since that time, nor had he seen any sold since that time (pp. 32, 33, and 34). He also claims to have made a chain illustrated by Ex. B, in 1868 or 1869 (p. 32); he is unable to state that any such were made since 1870. The manufacture of this chain was unsuccessful (p. 33, X-Q. 36).

He was in the employ of Baldwin, Sexton & Peterson during the time of the alleged manufacture of Exhibit B (p. 32, X-Q. 16-18). Shubael Cottle testifies that he was superintendent of Baldwin, Sexton & Peterson's factory during the same period, and that repeated attempts were made to

get up a chain like Exhibit B, all of which were unsuccessful (p. 19, Q. 39–41). Peterson of that firm, testifies that the chains were a failure until the links were soldered together (p. 37, X-Q. 34 and 36). This witness had also made chains like Exhibit C, about September, 1872.

He also produces Exhibit D, one of the links of Exhibit C, before they are soldered together.

The employers of this witness—Baldwin, Sexton & Peterson—are infringers of this patent (p. 37).

2. The alleged prior knowledge of Peterson.

Richard W. Peterson made chains like Exhibit A, in 1848 or 1850. He also sold chains like Exhibit B, in 1865 (p. 35). He swears that the spiral links were not soldered in the earlier chains, but after they had found the links would pull out, they soldered them together.

He says customers sent them back to us, and "after that we soldered them" (p. 37, X-Q. 34, 36).

Besides, this witness appears to have been mainly in the office, during the time of the alleged manufacture of chains like Exhibit B (p. 37, X-Q. 35). Cottle, who was superintendent of Baldwin, Sexton & Peterson's factory during that period, says that attempts were made to get up such a chain, but they were unsuccessful, and that no such chains were made without having the coils soldered together (p. 19, Q. 39–42).

Peterson has been an infringer of complainants' patent (p. 37, X-Q. 39).

3. Alleged prior knowledge of Chatelier.

Joseph F. Chatelier testified that he had seen chains like Ex. A, twenty years ago, but had never known one to be sold, although he had been continuously in the jewelry business since 1847; (p. 38, q. 4–8, p. 39, x-q. 20, 21, 22). He had seen chains like Exhibit B about five years ago (p. 38, q. 9), but on cross-examination, he testifies that these chains were not like Ex. B at all, the spiral links having been

"soldered together in pairs, thus permanently fastened, so that they can't be taken apart." (p. 40, x-q. 33.)

He further says, that the first one was sold five or six years ago; that his firm have made none within five years (p. 39, x-q. 29, 30, 31), and they seem never to have succeeded in selling what they did make (p. 39, x-q. 32). He also testifies that Ex. B is a "chain unfinished or in process of construction" (p. 40, x-q. 34, 35).

He also produced a piece of chain which had been worn as a watch chain some fifteen years ago, Exhibit E (p. 38), but he had never seen any like it sold or used, and had "never seen any made, or known them to be made." (p. 40, x-q. 36-40).

He also proves the manufacture and sale of chains represented by Defts' Ex. I, as far back as Aug., 1871 (p. 47, 48).

This witness has also been an infringer of complainants' patent (p. 40, x-q. 43).

4. Alleged prior knowledge of defendant Pearce.

Thomas D. Pearce testified he had sold chains like Exhibit A prior to 1858 (p. 43, q. 9, x-q. 11), but he had never sold any since 1860 (p. 43, x-q. 15), although he had been continuously in the business since that time (p. 43, x-q. 17).

5. Alleged prior knowledge of defendant Kursh.

He introduces Exhibit F, and proves it to have been old (p. 44). He also testifies to having made in 1869 necklaces composed of single rings, cut from fluted wire, like Ex. G (p. 45, q. 17-25) and on cross examination he says: "Every other ring was soldered together, partly finished, and then sprung, with the intermediate link, together, and closed by soldering the ends of the intermediate link together." (pp 46, 47, x-q. 51, 52, 53).

He also testifies to having made, in 1871, "a serpent bracelet," made of tubing a quarter of an inch in diameter, coiled into a spiral (p. 45, q. 35–

40, p. 47, x-q. 59 and 60). This bracelet was a stiff coil, intended to be slipped over the hand, to be worn on the thick part of the arm (Kursh, p. 46, x-q. 42; Cottle, p. 23, q. 75).

His first knowledge of a chain involving complainants' invention was on September 24th, 1873, (p. 45, q. 27, p. 47, q. 54), when his firm made chains like "Defendants' Exhibit H," which appears to be a copy of Cottle's invention, as shown in the drawings of the patent.

6. Alleged prior knowledge of Dixon.

He proves use and sale of tortoise shell and vulcanite chains represented by Exs. J and J^1 (p. 48).

AN EXAMINATION OF DEFENDANT'S EXHIBITS, PRIOR IN DATE TO COTTLE'S INVENTION, WILL SHOW THAT NONE OF THEM ARE SUBSTANTIALLY LIKE THE THING PATENTED.

Complainants first put the patented chain on the market on July 18, 1873 (p. 11, q. 6, p. 23, q. 74).

Defendants' Exhibit A is a chain composed of split rings alternating with closed links.

Defendants' Exhibit E, is a chain composed entirely of split rings.

A split ring is made by drawing down square wire of solid gold, winding it on a mandrel into a spiral form, placing it between dies, and then striking it with a drop hammer until the ends of the coil become flush with the top and bottom of the proposed split ring. It is then filed and finished (p. 32, q. 8-11; see a complete description of the process in complainants' evidence, pp. 17, 18, q. 26-35).

This process compresses the gold, thereby closing the grain and tempering or hardening it so as to make it somewhat elastic (p. 17, q. 27, 28).

Gold is not an elastic metal, except when compressed by hammering, as in the case of a split ring,

when it acquires elasticity. If, therefore, a split ring is annealed (*i. e.* heated to a cherry red heat) it loses by expansion all the elasticity given to it by the hammering in the dies (pp. 17, q. 29).

The testimony conclusively shows that the objects of Cottle's invention cannot be accomplished by means of split rings.

The split ring is not pliable enough to enable it to be easily separated from the link upon which it is sprung, nor elastic enough to prevent it being permanently spread apart after being separated for the purpose of springing on or off the adjoining link. The sharp edges produced by the hammering, spoil the color and polish of the link upon which it is sprung. In order to make perfect chains of the construction shown in defendants' Exs. A and E, it is necessary to anneal the links after they are sprung togetner, and this spoils elasticity, polish and color.

Cottle shows by a series of careful experiments, that the links of chains composed of split rings can neither be finished, polished or colored separately, nor taken apart at the pleasure of the wearer. We refer the Court to his testimony on these points, without further comment (Compl. evidence, pp. 16, 17, 18; q. 19-37; Complts' Ex., Nos. 6, 8; pp. 20, 21, 22; q. 49-70; Complts.' Exs., Nos. 10, 11).

It is not surprising, therefore, that these chains, composed of split rings, never went into extensive use. We have already referred to this subject in reference to Ex. A, when reviewing the testimony of the defendants' witnesses. Exhibit E appears to have been the only thing of its kind ever constructed.

Defendants' Ex. B illustrates a chain said to have been made of links composed of coils of solid gold wire, wormed one into the other. It is clearly shown that a gold chain like Exhibit B (if any such ever existed) was not a successful or practicable manufacture.

Cottle shows by experiment that the links of chains like Ex. B can neither be finished, polished or colored separately, nor taken apart by the wearer. See Cottle's testimony (p. 18, 19, 20, q. 38–45, 48, Compl. Ex. No. 9.)

Peterson, a partner, and Aiguier, an employee of the firm of Baldwin, Sexton & Peterson are the only witnesses relied on to prove the existence of Ex. B. Their testimony alone is sufficient to show that the attempt, if any, to make such a chain was an unsuccessful and abandoned experiment (Peterson, p. 37, x-q. 34, x-q. 36; Aiguier, p. 33, x-q. 36; see also Compl. Evidence, Cottle, p. 19, q. 39–41).

Defendants' Exhibits C, D, and I, illustrate chains composed of links of tubing closed or fastened by solder.

It is obvious from an inspection of these exhibits that this mode of putting the links together entirely neutralized the elasticity inherent in the tubing, while the form of the links makes it necessary that they should be soldered together in order to retain their connection with each other, thus rendering it impossible to take them apart after the chain is once finished, and making it necessary to polish or color, or otherwise finish the chain after the links are joined together in their permanent form (Complt's. Evidence, p. 23, q. 76; p. 25, x q. 105, 106; p. 28, 29, q. 142, 144, 145; Deft's. Evidence, p. 34, x-q. 37; p. 35, q. 55; p. 35, x-q. 60).

In fact, none of the anticipating exhibits constructed of tubing utilize in any manner its inherent elasticity; indeed it would appear from the proofs that Cottle was the first person to discover that such elasticity existed. (pp. 28, 29, q. 142).

Defendants' Ex. F is not a link for a chain; it is a breast-pin or ear-ring.

Defendants' Ex. G illustrates a spiral made of fluted tubing used by the defendant Kursh in 1869, to cut up into rings for chain links. He formed each link of a single ring fastened by soldering into

a continuous closed chain (Kursh, p. 45, q. 17–25; pp. 46, 47, x-qs. 51, 52, 53.)

Defendants' Exs. J and J[1] are chains composed of tortoise shell and vulcanite links respectively. Gold chains could not be made in this manner (Cottle, p. 23, q. 79).

In commenting upon the various constructions alleged to have existed prior to the date of Cottle's invention, the Court below says (p. 56):

"It being self-evident that chains composed of spiral links have been well known, it was insisted by the defendants that the chains heretofore in use possessed substantially the same qualities which are attributed to the patented article; and that the patented article had no advantage over the chains which were introduced as Exhibits, and which were made of gold split rings or split links in various forms. But it was satisfactorily proved that the split links, which are manufactured from solid gold wire compressed in dies and made elastic by hammering, are not sufficiently elastic to permit the chain to be joined without injury to the material into which the split link is sprung, and this injury renders necessary a repolishing or finishing of the completed article. Again, if the chain of split gold links is taken apart the act of separation causes the coil to spring asunder so that it loses its shape and beauty, and if a necessity of annealing arises the process of annealing destroys its elasticity. The difference between the patented article and a chain made of split gold rings is clearly marked. It is a difference in kind and not merely in degree.

Testimony was also offered by the defendants to prove that chains of spiral links made of tubing had been in use prior to the date of the invention, but the evidence failed to satisfy me that chains of open and unsoldered spiral links made of tubing had been manufactured prior to the date of the patent. Links have been made of tubing, which, after being united in a chain, were soldered together, and thus a chain was made which could not be taken apart, and which required finishing and polishing after it was soldered together. The testimony did not show that the plaintiff's invention of the open spiral link from tubing had been practically anticipated by others.

"A large serpentine bracelet, made of a coil of gold tubing, to be worn upon the fore arm, and to be kept in its place by pressure, was also introduced as an anticipating device. It manifestly is a very different article from a chain, and the fact that gold tubing was known and used in the manufacture of jewelry was conceded by the plaintiffs."

We submit that the defendant failed to overcome the presumption arising from the grant of the Letters Patent, that Cottle's invention was a new and

useful manufacture, and that the complainants were, therefore, entitled to the decree prayed for in the bill.

Second.

Errors are assigned to rulings upon the report of the Master, certain exceptions to his report, taken by the defendants, having been overruled by the Court:

Measure of Damages.

It will be appropriate to consider certain principles concerning money recoveries in patent suits, which seem to be established by the cases.

The thing granted by a patent is "the exclusive right to make, use and vend the invention or discovery, throughout the United States and the Territories thereof." (Sec. 4884, R. S.)

Patents can be granted for a new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof.

For an invasion of his exclusive right, a patentee can obtain pecuniary redress in two ways:

First.—By resort to a Court of Equity for an account of profits, where he is allowed to recover the profits actually realized by the infringer, upon the theory that in carrying on the infringing business, Equity will charge him as trustee for the patentee.

Dean *vs.* Mason, 20 How., 198.

These profits have been decided to be the full measure of the advantage derived by the infringer from the violation of the patentee's right. (Illinois Central R. R. Co. *vs.* Turrill, Cawood Patent, 4 Otto, 695.) Thus where the patent is for a machine or process, the infringer has been charged in equity with the saving due to the use of the machine or

process as contrasted with the use of other machines or processes open to the public, and capable of producing a similar product.

Where the patent covers a part only of the thing manufactured under the patent, the patented and unpatented parts must be carefully distinguished, and profits only allowed on the patented parts.

Where the patent covers a new product or composition of matter, or where it covers a combination constituting an entire new manufacture, the entire net profit of the infringing business is awarded to the patentee.

Rubber Co. *vs.* Goodyear, 9 Wall, 788.
Elizabeth *vs.* Pavement Co., 7 Otto, 126.

In Rubber Co. *vs.* Goodyear, it was distinctly and unanimously decided by this Court, that the Master was right when "he refused to allow manufacturers profits and interest on the capital stock" (p. 804), in reduction of profits.

Second.—By resort to a Court of law to recover by action on the case, the actual damages which he has sustained by the invasion of his rights.

There is a conclusive presumption of law that the plaintiff has sustained damage whenever his exclusive right is infringed in any manner. The exclusive right to make, use and vend, is the property of the patentee, and whenever that property is to any extent appropriated by another, the law conclusively presumes damage.

Whittemore *vs.* Cutter, 1 Gall., 483.
Davenport *vs.* Rylands, L. R., 1 Eq., 308.
Poppenhusen *vs.* N. Y. G. P. Comb Co., 2 Fisher, 62.

In equity, on the other hand, there is no presumption that the defendant, who is involuntarily charged as trustee for the real owner, ever realized any profits.

Under the provisions of the Act of 1870, incorporated into the Revised Statutes (sec. 4921), damages may be recovered by the complainant in an equity suit, and the Court can assess the same or cause the same to be assessed under its direction.

Where the patentee seeks to recover damages, they are now to be ascertained in the same manner and according to the same principles, whether he seeks his remedy by action on the case or by bill in equity. The assessment made under the direction of the Court, stands in the place of the verdict of a jury.

Damages are to be proved in a suit for the infringement of a patent precisely as they are to be proved in any other action for the recovery of damages. There is no arbitrary rule of law requiring an amount and kind of proof which is not required in actions for the invasion of other rights of property, in order to sustain a verdict or a finding of damages for the infringement of a patent.

Suffolk Co., *vs.* Hayden, 3 Wall., 315.
Birdsall *vs.* Coolidge, 3 Otto, 64.

The practical difficulties in arriving at a measure of damages in patent cases are of the same class as those which the Courts are constantly called upon to deal with in other cases where exact evidence of the plaintiff's loss cannot always, from the nature of the case, be given, and where approximate evidence must necessarily be resorted to, to prevent a failure of justice.

The difficulties presented by patent cases in this regard, are certainly no greater than in many actions brought on policies of insurance.

Mr. Sedgwick, in his treatise on the Measure of Damages (p. 593), under the head of "approximate evidence," says as follows:

Approximate Evidence.—The application of the rules which we have thus examined, in regard to the proof necessary to establish a claim for damages, often renders it difficult, if not impossible, to arrive with precise accuracy at the object of the inquiry. But justice is after all but an approximate science, and its ends are not to be defeated by a failure of strict and mathematical proof. The fol-

lowing language of Mr. Justice Story is full of good sense, and susceptible of frequent and wide application: "It is said, that it is difficult, and indeed impracticable, to ascertain the true and exact value of the property in this case. There may be difficulty, and perhaps an impossibility, to ascertain its exact and minute value, for we have no means of weighing it in scales, or fixing its positive price. But the same difficulty occurs in many other cases of insurance—as in cases of injuries to sails or rigging, or spars, by tempest, or by cutting them away in cases of jettison, and yet no one doubts that they must be contributed for according to their value, ascertained by a jury in the exercise of a sound discretion, upon proper evidence. Suppose that fruit is insured, and the vessel has a long passage, in which, by ordinary waste and decay, it must suffer some deterioration, and then a storm occurs, in which it suffers other positive damage and injury, or there is a jettison thereof; how are we to ascertain what diminution is to be attributed to natural waste and decay, and what to the perils of the seas? or what was its true value at the time of the jettison? There can be no positive and absolute certainty. The most that can be done is to ascertain, by the exercise of a sound judgment, what, under all the circumstances, may reasonably be attributed to one cause, and what to the other. Absolute certainty, in cases of this sort is unattainable. All that we can arrive at is an approximation thereto; and yet no man ever doubted that such a loss must be paid for if it is covered by the policy." (Rogers *vs.* Mechanics' Ins. Co, 1 Story, 303.)

In an action for the recovery of damages for the infringement of a patent, there are several ways, more or less exact, by which the plaintiff's damage can be ascertained. The most satisfactory and certain method is applicable to that class of cases where the patentee habitually licenses persons to practice his invention. In such a case the law is well settled that the license fee measures the plaintiff's recovery. This furnishes the jury with means of arriving at the exact damage.

A difficulty sometimes arises in this class of cases, where the extent of the infringer's use has been less than that for which the license fee is fixed, as where there is a definite price for the use of the machine or process during the whole term of the patent, and the infringer has used it but a short time (Birdsall *vs.* Coolidge, 3 Otto, 64); but where the rate of the license fee is proportioned to the amount of use, this rule of damages furnishes a standard which is exact and satisfactory, because the patentee, by offering his invention for sale to the public, has put a price upon it, and the public,

by purchasing licenses, have definitely fixed its market value. Exceptional cases may arise where the infringer may have damaged the patentee beyond the amount of the license fee, but in such cases the plaintiff will be held to strict proof of the special damage.

Hogg *vs.* Emerson, 11 How., 587.
Seymour *vs.* McCormick, 16 How., 480.
Philip *vs.* Nock, 17 Wall., 460.
Packet Co. *vs.* Sickles, 19 Wall., 611.
Birdsall *vs.* Coolidge, 3 Otto, 64.
Marsh *vs.* Seymour, 7 Otto, 359.

In cases where the patentee does not sell licenses, but desires to retain to himself his exclusive right, general evidence of a less certain character, must necessarily be resorted to in order to ascertain the damages.

Judson *vs.* Bradford (Clifford, *J.*), 16 Off. Gaz. 171.
Suffolk Co. *vs.* Hayden, 3 Wall., 315.
Packet Co. *vs.* Sickles, 19 Wall., 611.

His right can be invaded in three ways: by the infringer *making* or *using* or *vending* the subject-matter of the patent.

(1.) Mere *making* by an infringer cannot inflict pecuniary injury upon the patentee, but as the law conclusively imports damage from the violation of the exclusive right, nominal damages will be given in such a case.

Whittemore *vs.* Cutter, 1 Gall., 483.

(2.) Where the right to *use* is invaded, it is well settled that the value of that use can be recovered as damages.

Wintermute *vs.* Redington, 1 Fisher, 239.
Page *vs.* Ferry, 1 Fisher, 298.
Bell *vs.* Daniels, 1 Fisher, 372.
Brodie *vs.* Ophir Silver Mining Co., 4 Fisher, 137.

Thus where the infringer uses the patented process or machine for manufacturing purposes, the value of the use will be measured by the increased productive power, or by the saving effected by the patentee's process or machine as compared with the productive power, and expense of using other processes or machines open to the public, and employed for making the same product.

Suffolk Co. *vs.* Hayden, 3 Wall. 315.
Whittemore *vs.* Cutter, 1 Gall, 483.
Sewell *vs.* Collins, 1 Fisher, 289.
See also, Illinois Central R. R. Co. *vs.* Turrill, 4 Otto, 695.

This sometimes furnishes a measure of damages capable of being computed with great accuracy, but in many cases the precise estimate can not be made and approximate evidence must be resorted to, to guide the jury or the Court or Master, in assessing the damages. In this way the plaintiff obtains redress by a recovery equal to the money value of the *privilege of using*, usurped by the defendant.

(3.) Where the right to *vend* is invaded, the damages to be recovered by the patentee, should be measured by the money value of the *privilege of vending* usurped by the defendant.

In ascertaining the money value of the privilege of vending in cases where the patentee does not grant licenses, great difficulties are frequently presented, and approximate evidence must be resorted to, to prevent a failure of justice. The recovery in such a case is measured by the ordinary or usual profits derived from vending the thing patented, just as in the case of infringement by using, the recovery is measured by the ordinary or usual profits derived from using the thing patented. The demand existing in the market, evidenced by sales made, may be shown.

Cowing *vs.* Rumsey, 8 Blatch., 36.

One class of approximate evidence that is commonly resorted to, to ascertain the money value of the privilege of vending, the exclusive right to which

is vested in the patentee, is to ascertain the profits actually realized by the defendant from his unlawful sales, upon the theory that his profit furnishes a fair indication of the value of the privilege of vending which is vested in the patentee, and which the defendant has usurped.

Seymour *vs.* McCormick, 16 How., 480.
Philip *vs.* Nock, 17 Wall., 460.
Parker *vs.* Hulme, 1 Fish., 44.
Wayne *vs.* Holmes, 2 Fish., 20.
Case *vs.* Brown, 2 Fish., 268.
Wilbur *vs.* Beecher, (Nelson, *J.*), 2 Blatch., 132.
Hall *vs.* Wiles, 2 Blatch., 194.
Pitts *vs.* Hall, 2 Blatch., 229 (Nelson and Conkling, *JJ.*)
Sickles *vs.* Borden, 3 Blatch., 535.

The resort to this mode of measuring damages arising from the invasion of the right to vend, has caused some confusion in cases upon the subject, many of which do not seem to recognize the broad distinction between damages and profits, and seem to consider that in an action at law, the defendant's profits are recovered as such, when in reality they are merely resorted to as one mode, and not always the most exact and satisfactory one, for ascertaining the real value of what the defendant has appropriated.

Another class of approximate evidence that may be resorted to, to ascertain the value of the vending, the exclusive right to which is vested in the patentee, is to ascertain the profits ordinarily realized by the plaintiff from the sale of the patented goods, upon the theory that his profit furnishes a fair indication of the value of the privilege of vending, the exclusive right to which is vested in the patentee.

Hawes *vs.* Gage (Woodruff, *J.*), 5 Off. Gaz., 494.
Buck *vs.* Hermance (Nelson, *J.*), 1 Blatchf., 398.

Pitts *vs.* Hall (Nelson and Conkl'g, *J. J.*), 2 Blatchf., 229.
Tatham *vs.* Leroy, 2 Blatchf., 474.
Philip *vs.* Nock, 17 Wall., 460.

Many cases also countenance the doctrine that such evidence is, under some circumstances, to be considered by the jury as direct, and not merely as approximate evidence, to enable them to fix the value of the right invaded, as for instance, in cases where the patentee is ready to supply the market, the demand is brisk, and the competition with him is direct. In this class of cases, it is held that the jury are justified in finding, that as matter of fact the plaintiff would have sold the goods which the defendant sold, and that the profit which the plaintiff would have thus made furnishes an exact measure of damages capable of arithmetical computation.

Russell *vs.* Place, 9 Blatchf., 173.
Cowing *vs.* Rumsey, 8 Blatchf., 36.

Another method of measuring the damages arising from the invasion of the exclusive right to vend, is recognized by some recent cases, where the patentee has put his goods upon the market, and the infringer, entering into competition with him, has forced him to lower his prices to meet the demands of the market. In such cases the patentee has been allowed to prove the profit on his sales under the reduced prices and to compare it with the profit on his sales at his previous prices, and to take the difference as the amount of damage. This is perhaps the least certain class of approximate evidence that is now sanctioned by authority.

Carter *vs.* Baker, 4 Fisher, 404.
Sargent *vs.* Yale Lock Co., 17 Off. Gaz., 105.
Smith *vs.* O'Connor, 6 Fisher, 469.

Where profits on sales are resorted to for the purpose of ascertaining the money value of the exclusive privilege of vending, usurped by the defendant, these profits are to be ascertained upon precisely the same principles as those which regulate

a court of equity in taking an account of the defendant's profits. It can make no difference in this regard whether the evidence used to establish the value of the exclusive privilege of vending is of the amount of the defendants' or of the plaintiff's profits. In both cases the evidence is resorted to merely as furnishing a means of ascertaining the general value of the right invaded.

If the plaintiff in the action offers evidence of the defendants' profits from the sale of the thing patented to show the value of the privilege invaded, it is then competent for the defendant to show that the profits were partly due to other causes than the sale of the plaintiff's invention, or to show any other facts and circumstances tending to lessen the value of the rights he has invaded. The burden of proof has been shifted, and now rests upon the defendant and there is evidence from which a jury is authorized to infer, from the experience of the defendant, that an amount of money equal to his profits could be made from vending the thing patented, and that therefore that is a fair measure of the value of the exclusive right to vend, which has been appropriated.

So too, if the plaintiff in the action offers evidence of *his* profits from the sale of the thing patented to show the value of the right invaded, it is then competent for the defendant to show that the profits were actually due to other causes than the sale of the plaintiffs' invention; together with any other facts and circumstances tending to lessen the value of the usurped privilege. Here also the burden has been shifted and now rests upon the defendant, and there is evidence from which a jury is authorized to infer, from the experience of the plaintiff, that an amount of money equal to his profits can be made from vending the thing patented, and that therefore *that* is a fair measure of the value of the exclusive right to vend which has been appropriated.

FACTS OF THE CASE BEARING UPON THE DAMAGES.

The facts bearing upon this branch of the case are as follows:

Cottle, the inventor named in the patent upon which the suit is brought, perfected his invention, and made the gold chains in controversy some time in or before the month of July, 1873. The gold chains, afterwards patented, a sample of which is shown in Complainant's Exhibit No. 1, were actually upon the market on July 18, 1873, and a large trade in them immediately sprang up (p. 11, Q. 6–10).

Cottle thereupon, on January 10, 1874, made application for his original patent, which was granted to him on February 3, 1874 (p. 51).

The plaintiffs and defendant are manufacturing jewlers, both having stores in the city of New York in the same building. The defendant's store was on the same floor as the plaintiffs' store and next door to it (p. 62).

The plaintiffs having put their goods upon the market in July, 1873, in the Fall of the same year, the defendant's firm, their next door neighbors, began making and selling goods of the same construction as that shown in the patent (pp. 45, 47). A specimen of the chains so put on sale by the defendant's firm in the Fall of 1873 is shown in "Defendant's Exhibit H" (p. 47). A comparison of this Exhibit with "Complainant's ExhibitNo. 1," which is the plaintiffs' chain described in the patent, will show one to be almost a *fac simile* of the other.

The situation of the parties was this: they had jewelry stores on the same floor, in the same building, one immediately adjoining the other. There was a very brisk demand for these gold chains, and both were selling them, one firm carrying on the business under the patent, and the other pirating the invention, directly before the eyes of the patentees and of the public.

When the suit was commenced Thomas D. Pearce

alone was served with process, the other defendants' being in Pennsylvania, out of the jurisdiction of the Court. (P. 2.)

The patent having been sustained on final hearing, the plaintiffs proceeded under Section 4,921 R. S., which provides that "upon a decree being rendered "in any such case for an infringement, the com- "plainant shall be entitled to recover in addition to "the profits to be accounted for by the defendant, "the damages complainant has sustained thereby, "and the Court shall assess the same or cause the "same to be assessed under its direction."

At the outset of the hearing before the master, in accordance with the usual practice, the defendant presented an account of the chains adjudged to infringe, (Exhibit No 1, K. G. W. Master, p. 58). This account showed five different varieties of infringing chains, designated as patterns Nos. 1,487, 1,472, 1,566, 1,567 and 1,624. Photographs of these patterns were also presented, a wood cut taken from which is on page 64.

The account, Exhibit No. 1, showed, as to each of the five varieties of chain, the number of chains, the number of spiral links made in accordance with the second claim of the re-issue, the weight of the individual chains, the total weight of each variety, and the proportionate weight of the spring spirals in each variety.

Pattern No. 1,472 is entirely composed of the spiral spring links, which form the subject-matter of the second claim.

Pattern No. 1,487 is apparently an exact copy of what is shown and described in the patent, and consists of alternate closed links and open spiral links, being the precise subject matter of the first claim of the patent.

Pattern No. 1,567 is likewise composed of alternate closed links and open spiral links such as are described in the patent, but the shape of the closed links is varied. The closed links consist of two cross pieces, soldered firmly together so as to form

one link, instead of consisting of a single ring as shown in pattern No. 1,487. (p. 63).

Pattern No. 1,624, has eight joints between each successive spring spiral (p. 63).

Pattern No. 1,566 has four movable links between each successive spring spiral (p. 63).

The plaintiffs claimed, inasmuch as the pattern No. 1,472 was composed entirely of the open spiral links which form the subject matter of the second claim, that under the construction of the claims given by the Court, they were entitled to recover the entire profits that the plaintiff would have made by the sale of such chains.

The plaintiffs also claimed a like recovery in respect to each of the other patterns of chains, upon the ground that they each contained the entire subject matter of the first claim, the second claim being infringed by the spiral spring links, also,

The plaintiffs stated with great accuracy the profit, that according to their experience, could be realized in the market from the sale of the defendant's infringing chains, after deducting every possible expense that could enter into and form an element to increase the cost (pp. 59–61).

To prevent a failure of the reference, however, the plaintiffs presented proofs of profits, based upon four different theories:

(1). Upon the theory above stated, that the plaintiffs were entitled to the entire profit on each chain as a new article of manufacture, covered by the patent.

(2). That the plaintiffs were entitled to the net profits derived from the spiral spring link of the second claim only, on each pattern.

(3). That the plaintiffs were entitled to the net profits derived from the spiral spring link and one adjoining link.

(4). That the plaintiffs were entitled to the net profits derived from each spiral spring link and the

two links between which it is; that is to say, on each spiral and the two little rings which join it. This was based upon the idea that under the view most unfavorable for the plaintiffs, each series consisting of a spiral spring link and two adjoining closed links, must be considered as a chain of three links of the kind covered by the first claim of the patent. (Pp. 61, 62).

We will now show the result of these calculations:

On the first theory:

On pattern No. 1487.....	$541 23
" " " 1472.....	107 90
" " " 1566.....	221 80
" " " 1567.....	260 22
" " " 1624.....	87 39
Total.....	$1218 54

This was the amount that the plaintiffs claimed they were entitled to recover (p. 61).

On the second theory: of allowing the plaintiffs for the spiral links alone, the result would have been:

On pattern No. 1487.....	$360 82
" " " 1472.....	107 90
" " " 1566.....	55 45
" " " 1567.....	65 05
" " " 1624.....	21 85
Total.....	$611 07

(p. 61-62).

The third theory would have yielded a total net profit of $1015.74.

The fourth theory would have yielded a total net profit of $1038.15.

The third and fourth theories were not acted upon at all by the Master, and as the plaintiffs have not excepted to his report in this regard, it will be unnecessary to consider them in detail.

The master disallowed the claim of the plaintiffs for the entire profits on the 29 chains made like pattern No. 1,566, and made the like ruling in respect to the 24 chains made like pattern No. 1,624. (p. 70). He also refused, on these two patterns, to allow the plaintiffs the profits derived from the spiral and one adjoining link, and he also refused to allow the plaintiffs the profit derived from the spiral and the two adjoining rings. In respect to these two patterns the master rejected from the calculation all profits due to the parts of the chain intermediate between the successive spiral links. The result was as follows:

Amt. claimed by plffs. on 24 chains of pattern No. 1,624, being net profit on whole chain	$87.39
Amt. allowed by Master, being on the spirals alone	21.85
Deduction for what Master considered unpatented parts of chain	$65.54
Amt. claimed by plffs. on 29 chains of pattern No. 1,566, being the net profit on the whole chain	$221.80
Amt. allowed by master, being on spirals alone	55.45
Deduction for what master considered unpatented parts of chain	$ 166.35
On chains like No. 1,472, which consist of a succession of spiral links precisely such as are described and claimed in the second claim of plaintiffs' patent, the master allowed the whole profit	$ 107.90
On chains like No. 1,487, which are the precise thing shown in the patent and claimed in the first claim thereof, the complts. were allowed the profits which they would have made on the entire chain	$ 541.23
On chains like No. 1,567, being also composed of alternate open and closed links, as covered by the second claim, the master made the like allowance	$ 260.22

The total report was for..... ...$ 986.65
Instead of.....$1218.54
as claimed by the plaintiffs (pp. 70, 61).

Exceptions were filed to this report (p. 71), which were all overruled by the Court. The exceptions are expressed at considerable length, and take the form of an argument against the master's report.

THE EXCEPTIONS TO THE MASTER'S REPORT.

THE FIRST EXCEPTION is stated in the assignment of errors, as follows:

"1st. That the Master should have found that "the damages proved as to the first claim of the "patent were $131\frac{25}{100}$ instead of $986\frac{65}{100}$."

This exception, as it appears in the record (p. 71) is stated in two two forms, in substance, as follows:

(1.) That the defendant had a right to make chains of alternate links, one solid and one of tubing—provided he soldered the tubing together, so as to make it also a closed link; the point of infringement residing entirely in leaving the links of tubing unsoldered or open. "The question to be determined, therefore, was, 'what advantage did the defendant derive from using the complainants' invention—the open links—over what he had in using other links then open to the public, and adequate to enable him to obtain an equally beneficial result?'"

"The fruits of that advantage are his profits; they are all he derived from the existence of complainants' invention. (Mowry *vs.* Whitney, 14 Wall., 651.) *They are all complainants would have derived from the invention, and therefore they determine the damages accruing to them.*"

(2.) "That the defendant had a right to make his chains of alternate closed links and open spiral links, the spiral links being made of solid gold wire, and this leads to the enquiry: What advan-

tage has defendant gained, or what damage have complainants suffered by reason of the defendant's having used open spiral links of gold tubing over what would have enured from the use of open spiral links of solid wire." That the testimony at most would only have warranted the Master in finding as damages the amount saved by finishing the links separately, which is possible under this invention, and not possible under the old methods of constructing a chain. This saving amounts, according to the testimony, to $131.25, on all the chains (pp. 72–73).

All the defendants' objections to the Master's report are substantially embodied in this first exception.

The answer to this exception is that this patent is for a new article of manufacture, and not for a process. The Court below, in overruling the exception, clearly states the distinction, as follows:

"The patented and the unpatented articles are entirely distinct from each other. By the use of closed or soldered links of tubing, or links of solid wire, the manufacturer cannot obtain the result which is found in the patented invention, and therefore the principle which was decided in *Mowry* vs. *Whitney*, 14 Wall., 620, and which is invoked by the defendants, is not applicable.

"That was a case of a new process of manufacture, and the Court says that the proper inquiry was what was the advantage in bringing the article by the patented process to a state of perfection over bringing it to the same state by other processes, open to the public and which would be equally beneficial.

"In this case the links of a chain which are open to the public, cannot, from their nature, make a chain which is like the patented article in its peculiar characteristics.

"The Master might as well undertake to estimate the advantage which the patented article possesses over any other gold chains as over those which the defendants have selected.

"The Master seems to me to have observed in this case, the rules which have heretofore been sanctioned by the Circuit and Supreme Courts.

"The cases of Buck *vs.* Hermance (1 Blatchf. C. C. R., 398); Pitts *vs.* Hall (2 Blatchf. C. C. R., 229); Cowing *vs.* Rumsay (8 Blatchf. C. C. R., 36); Livingston *vs.* Jones (2 Fisher's Patent Cases, 207); Seymour *vs.* McCormick (16 How., 480), are in point."

This rule is distinctly recognized by this Court in the case of Elizabeth *vs.* Pavement Co., 7 Otto,

126–141–142. See also, Rubber Co. *vs.* Goodyear, 9 Wall., 788. Philip *vs.* Nock, 17 Wall., 460.

THE SECOND EXCEPTION is stated in the assignment of errors, as follows:

"2d. That no apportionment of the profits having been made between the parts of the chain "patented and those parts not patented, the Master "should have found either nominal damages only, "or else should have based his finding upon the "only actual basis of calculation afforded by the "evidence, to wit: $\$1\frac{00}{100}$, $\$1\frac{25}{100}$, and 50 cents per "chain."

This exception as it appears in the record (p. 73) is to this effect: that it was incumbent on the complainants to prove their actual damages, apportioning the profits on the patented and unpatented parts of the thing patented so that the Master might compute the actual profits or damages on the patented parts, and in default of such proof by the complainants, the Master should have found only nominal damages.

The exception contains also the substance of the first exception, and prays the Court to amend the Master's finding to the profits, of 50 cts., $1, and $1.25 per chain, (total, $131.25), saved in the process of manufacturing the chain, by reason of the separate polishing and finishing of the links, over what it necessarily costs to manufacture unpatented chains of the same fineness and size.

This exception seems to be based on an entire misunderstanding of the evidence. The proofs before the Master apportion the profits on the various parts of the articles of manufacture, with the utmost minuteness, to meet either of four possible theories that might be adopted by the Master as to what constituted patented and unpatented parts of the articles.

In the second paragraph of this exception (p. 73) a statement is made with regard to the evidence of the witness, Cottle, which must have been made in entire forgetfulness of the minute evidence given

by him before the master on pages 61 and 62, at a later date than when he made the statement which is quoted. The master has been governed in his report by the precise principle stated to be the proper rule in this second exception. He has refused to allow the plaintiffs, the profits on what he considered the unpatented parts of the gold chain. He has carefully apportioned the profits between the patented and unpatented parts, and has allowed the plaintiffs only the profits due to the patented parts of the chains. The principle acted upon by the master in awarding the entire profits upon the three patterns, Nos. 1472, 1487 and 1567 is exactly in accordance with the principles laid down by this Court in Elizabeth *v.* Pavement Co., 7 Otto, p. 126.

THE THIRD EXCEPTION is stated in the assignment of errors as follows :

"3d. That complainants never having made any "chains of the patterns Nos. 1567, 1566, or 1624, "the Master should not have found that they ever "would have made such chains, and therefore "should have limited his finding of damages "proven upon them to the saving of fifty cents per "chain upon those patterns."

This exception only affects the master's finding on three of the patterns, namely :

On spiral links alone on chains like No. 1,624	$21.85
Ditto on No. 1,566	55.45
And profits on the entire chain like No. 1,567	260.22

The substance of this exception is that the Master should have awarded only *the amount of saving in the process of making* this article, and this has already been sufficiently answered by the suggestion that the result of this process is a *new manufacture* unlike anything else. It is a patent for a new article of manufacture, an incident of the making of which is a new and cheaper process of constructing gold chains.

The case of Elizabeth *vs.* Pavement Co., *supra*, would seem to be conclusive against this exception.

In respect to patterns Nos. 1,624 and 1,566, the Master excluded all but the spiral spring links, and allowed the plaintiffs only for those. If the defendant had done his duty, he would have gone next door and bought the spiral links for these chains, when the plaintiffs would have made their profit allowed them by the Master on these two patterns. The Master has been able "in the exercise of a sound judgment to ascertain the damages, or, in other words, the losses to the patentee or owner, by the piracy, instead of the purchase of the use of the invention."

Suffolk Co. *vs.* Hayden, 3 Wall., 315, p. 320.

Pattern No. 1567 is plainly the thing described and claimed in the plaintiff's first claim. The mere variation in form of the closed links cannot save the defendant from the consequences of his infringement.

If this variation in form entitled the defendant to any reduction, the burden of proof rested on him to show its amount.

Pavement Co. *vs.* Elizabeth, Circuit Court, 6 Off. Gaz., p. 767.

This opinion received the full concurrence of this Court.

Elizabeth *vs.* Pavement Co., 7 Otto, p. 141.

The defendant confused his variation with the plaintiff's invention, and having caused this confusion, he must show how much is to be credited for this variation.

Carter *vs.* Baker, 4 Fisher, 404.
Pavement Co. *vs.* Elizabeth, 6 Off. Gaz., 767.

It is also a sufficient answer to this exception to say that the evidence was sufficient to establish the

general value of vending the invention, in the absence of any contrary proof by the defendants.

THE FOURTH EXCEPTION is stated in the assignment of errors, as follows:

"4th. That the only damage which complainants "have sustained, has been the advantage which "defendant gained by the separate finishing of the "open spiral links of tubing, to wit: $\$1\frac{00}{100}$, $1\frac{25}{100}$, "and 50 cents respectively."

This exception as it appears in the record is in substance as follows:

That the witness Cottle having testified that the complainants nearly every day *in December*, 1874, received orders which they could not fill, as they had not the goods for the orders, although they sold all they had on hand, and all they could make without interfering with other goods, it is not proved that complainants would have made or sold the chains made or sold by the defendants, or that they have suffered any damage or loss in that behalf, by reason of defendant's sales; but, on the contrary, it is proved by this testimony, that the only damage which complainants have sustained, has been the advantage which the defendant gained by the separate finishing of the open spiral links of tubing, to wit: $1, $1.25 and 50 cents respectively, upon the several patterns comprised in Exhibit 1.

The suggestion in respect to reducing the recovery to the amount saved in the process of manufacture has already been sufficiently treated of.

The entire evidence upon the subject referred to in this exception, is as follows (p. 22):

"Q. 71. Have you practically found your patented chain to be a "successful article in manufacture? State how you found it ap- "preciated by the public.

"A. I have. We made and sold from the 1st of February, 1874, "up to the time Mr. Hale gave his testimony, about six hundred "chains, valuation about twenty-five thousand dollars. Since then "we have sold all we had on hand, and all we could make without "interfering with other goods; and have received orders nearly

"every day *in the month of December*, which we cou'd not fill, as we "had not the goods for the orders. Since Mr. Hale's testimony, "I think we have sold $6,000 to $7,000 worth."

This testimony was given on January 5, 1875. Mr. Hale's testimony had been given October 30, 1874.

On his examination before the Master, Mr. Cottle explains this statement as follows (p. 62):

"Q. Will you state in reference to your answer to question 71 in "the proofs for final hearing, how, and under what circumstances, "and for what reason, you could not fill certain orders as therein "stated?

"A. We had orders in the *month of December* which we could not "fill at the day they were ordered, for the reason that they would "not wait for us to make them, and they could go in next door and "get them without waiting for them. The defendant's store was "next door to us, on the same floor and same building."

It is a matter of general knowledge that the month of December is a period of great activity in the jewelry trade, owing to the occurrence of the Christmas holidays.

Mr. Hale testifies that "December is worth more "than any other two months in the year," (p. 11, Q. 10).

The period covered by the accounting before the Master was from February 24, 1874, the date of the re-issue patent, down to April 21, 1875, when a perpetual injunction was ordered against the defendant. In accordance with the usual practice in such cases the defendants presented to the master an account showing the amount of the infringing goods which formed the subject-matter of the reference. This account does not designate particular times at which the infringing goods were sold by the defendants.

We submit that if the defendants were entitled to any advantage derived from the facts stated by the witness Cottle, to the effect that the holiday business in 1874, in these goods was so large that "nearly every day *in the month of December*," the plaintiffs were unable to promptly fill the orders, it was the defendant's duty to show how many of the

infringing chains were sold during the month of December, 1874, in which month alone the demand seems to have out-run the complainant's capacity for supplying it without subjecting the customers to delay. The dates of these infringing sales were peculiarly within the knowledge of the defendant, and it was for him to show, in reduction of plaintiffs' damages, what portion of the sales, if any, took place during that particular month. As he has furnished no such proof, the Court below had no reason to assume that any of the infringing sales were made by the defendants in December, 1874.

THE FIFTH EXCEPTION is stated in the assignment of errors as follows:

"5th. That the only actual damages proven are "$131\frac{25}{100}$, to wit: $\$1\frac{25}{100}$ per chain on pattern 1472, "$1.00 per chain on pattern 1487, 50 cents per chain "on patterns 1566, 1567, and 1624; and the evidence "did not warrant the Master in finding that the "damages sustained by the complainants in the "premises are $\$986\frac{65}{100}$."

This amount of $131.25 is the amount of saving produced by polishing and finishing the links separately, which is practicable in making the new article of manufacture which is the subject of this patent. The answer to this exception is, that the patent is not for a new process of making an old manufacture, but for a new article of manufacture *the exclusive right to vend* which is vested in the patentees, and that the damage to the plaintiffs is the *money value of the exclusive right to vend*, which has been invaded, which can be measured only by the money profit incident to the *vending* of the thing patented, just as the damage, in case of a patented process or machine used for making an old manufacture, is *the money value of the exclusive right to use* which has been invaded, which can be measured only by the money profit or saving incident to the *using* of the thing patented.

Conclusion.

We submit, therefore, that the decree of the Circuit Court overruling the exceptions to the Master's Report, should be affirmed.

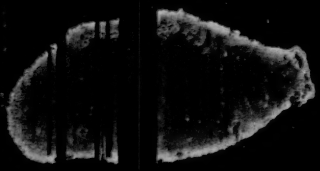
1. Because, in the absence of contradiction by defendant, there was sufficient proof that the general value of the infringing sales, the exclusive right to which belonged to the plaintiffs, was at least equal to the sum assessed, after excluding all unpatented parts of the chains.

2. Because there was sufficient evidence under the peculiar facts of this case, in the absence of any contradiction by the defendant, to authorize the Court to find that the defendant, by his infringement, came into direct competition with the plaintiffs and prevented them from supplying the market to the extent to which the infringing articles were sold.

3. Because the damages awarded were so moderate and reasonable in amount, that if they had been assessed by a jury, the Court would not have been justified in setting them aside. The assessment of damages by the Court, through a Master, in a suit in equity, in accordance with the statute, should only be disturbed under circumstances which would warrant the setting aside of a verdict. The cause of action is *ex delicto*, and the judgment should only be reversed, on a question of damages, in an extreme case.

Hogg *v.* Emerson, 11, How. 587, p. 608.

B. F. LEE,
Of Counsel with Appellees.



12-118

IN THE

SUPREME COURT

OF THE UNITED STATES.

Nos. 878 & 879 October Term, 1880.

James M. Schoonmaker, Samuel S. Brown and James H. Brown, Plaintiffs in Error,

VERSUS

John N. Davidson, Joseph Davidson, T. W. Watt and R. Henderson, parties as R. Henderson & Co., for use of Robert Henderson and Samuel Watson, Admrs. of R. Henderson, Defendants in Error,

AND

James M. Schoonmaker and Samuel S. Brown, Plaintiffs in Error,

VERSUS

John Gilmore, Defendant in Error.

ERROR TO THE SUPREME COURT OF PENNSYLVANIA, WESTERN DISTRICT,

At Nos. 261 and 311 of October and November Term, 1879.

GEO. SHIRAS, JR.
JOHN BARTON,
ALEX. M. WATSON,
Attorneys for Motion.

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VERSUS

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ERROR TO THE SUPREME COURT OF PENNSYLVANIA, WESTERN DISTRICT,

At Nos: 261 and 311 of October and November Term, 1879.

MOTION TO DISMISS THE WRITS OF ERROR UNDER RULE 6, S. Ct. U. S.

And now come R. Henderson and Company, and John Gilmore, respectively defendants in error, and by Geo. Shiras, Jr., John Barton and Alex. M. Watson their attorneys, move to dismiss said writs of error, and to affirm the judgments of the state court with damages and costs, for the following reasons:

REASONS.

(I.) The Court of Common Pleas of Allegheny County, State of Pennsylvania, had jurisdiction of the cause of action in said cases, under the saving clause in the judiciary act of 1789, section nine, conferring jurisdiction on the District Court of the United States, "of all civil causes of admiralty and Maritime jurisdiction, saving to suitors in all cases the right of a common law remedy, where the common law is competent to give it."

(II.) The writs of error, under the law of said ninth section of the judiciary act, and paragraph third of rule six of this Court, should be dismissed, and the judgments of the state court affirmed, with damages and costs; because it is manifest said writs were taken on grounds "so frivolous as not to need further argument," and tend only to delay the defendants in error in the collection of their judgments. Desty's Fedl. Prac. 247–8.

(III.) The matters in dispute in each of these cases, and the judgments in the state court, do not exceed the sum of $5000.00. Exclusive of interest and costs, that being the limit in the act of February 16, 1875, 18 Stat 316, in all cases of writs of error; and the judgment in favor of R. Henderson and Company, in the state court, entered January 21, 1879, for $4,581.13, and affirmed by the Supreme Court, at No. 311 of October and November Term, 1879, on the 13th day of January 1880, and the judgment of John Gilmore in said Court entered January 21, 1879 for $3,284.04, and affirmed by said Supreme Court on the 13th January, 1880, at

No. 261 of said term, being respectively for sums less than said limit, this Court has no jurisdiction in the premises. 93 U. S. R. 233, Yanzo Del Vale vs. Harrison et al. 100 U. S. R. 7, Tinsman vs. National Bank of Mt. Pleasant.

BRIEF AND ARGUMENT IN FAVOR OF THE MOTION TO DISMISS.

These causes were tried by the same jury in the Court below, and argued together in the Supreme Court of Pennsylvania, in as much as the same questions of law and fact were involved in them.

They were brought against the Plaintiffs in error, defendants below, and owners of the Steam Tug "Jos. Bigley," that was descending the Ohio River, a few miles below Pittsburgh, when the fleet of barges in front of the Bigley ran against the Coke barges of John Gilmore, one of the plaintiffs below, in which barges Henderson & Co. had laden a large quantity of Coke, which lay at a landing on Neville Island, the barges were damaged, and the Coke lost and damaged. They were actions on the case charging the defendants with negligence by reason of which the loss and damage was done and sustained.

The defendants in the lower court plead "not guilty," and to the jurisdiction of the Court of Common Pleas, alleging that plaintiffs were bound to bring suit in the U. S. District Court in admiralty, and could not sue at Common law, and after trial, verdicts were rendered on the 21st day of January, 1879, in No. 166 September Term, 1877, for Henderson & Co. for $4,581.13, and in No. 572 June Term, 1877, for Gilmore for $3,284.04, which were respectively removed to the Supreme Court of Pennsylvania, and there the judgments were affirmed January 13, 1880, upon the ground that the State Court has jurisdiction in the premises.

The point submitted by defendants below, and plaintiffs in error in this Court, and refused by the Court, is the following: "That in causes of collision between steam boats while navigating the Ohio River, the respective claims and liabilities of the parties

owning or navigating said boats, for damages caused by such collision, presents a cause of admiralty jurisdiction, vested exclusively in the Courts of the United States, and of which, by the constitution and laws of the United States, the State can not take cognizance." The facts were, that the Coke barges damaged lay at shore, and under this point, defendants attempted to raise the question of jurisdiction, and the ruling of the Court, even if the facts established a marine collision, it is submitted, is not erroneous, but in perfect harmony with the law and decisions of this Court, so often and plainly declared, that to compel the defendants in error to abide the ordinary delay of the law, will be greatly to their prejudice.

The Act of 24th Sept., 1789, sec. 9, provides, that the District Court of the United States shall have jurisdiction "of all civil causes of admiralty and maritime jurisdiction, *saving to suitors in all cases* the right of a common law remedy, where the common law is competent to give it." Thus clearly, in the letter of the Act, giving these parties their remedy at common law In 11 Wall. 188 Leon vs. Galceron, this plain construction of the Act is recognized, without qualification or distinction, as to actions on contract, or for torts, recognizing but one class of cases in which the jurisdiction of the United States Courts is exclusive—*suits in rem*. In the language of the Court, the party injured "may have an action at law in the Circuit Court, or in the State Court, because the common law, in such case, is competent to give a party a remedy, and the right to such remedy is reserved and secured to the suitors by the saving clause in the ninth section of the Judiciary Act."

The Hine vs. Trevor, 4 Wall. 570, and the case of The Belfast, 7 Wall. 644, both proceedings *in rem*, were brought in State Courts, and it was there held that the United States Court had exclusive jurisdiction, and that the saving clause of the Act did not warrant a proceeding *in rem*, in a State Court, in which proceeding the jurisdiction of the United States Dictrict Court is exclusive. And this Court, in these cases, and in the Moses Taylor, 4 Wall. 431, held that, under the saving clause in the Act, suitors may bring their actions against the owners *in personam*, either in the

State Courts or the Federal Courts, if there be the proper parties. In The Hines vs. Trevor supra, 571, the Court say. "Such actions may also be maintained against a defendant in the Common law Courts, as the Common law gives, all in consistence with the grant of admiralty powers in the ninth section of the Act." In the Belfast, 7 Wall. 644, the Court say: "Original cognizance is in the District Court, except where the suitor may see fit to elect to pursue a common law remedy in the State Courts, or in the Circuit Court, as before explained, in all cases where such a law is applicable." "A party may proceed in admiralty, *in rem*, or he may bring a suit *in personam* in the same jurisdiction, or he may resort to his common law remedy in the State Courts, or in the Circuit Courts of the United States, if he can make proper parties to give jurisdiction." See also 1 Kent's Com. 337, side page note, 9th ed.

The saving clause in the Judiciary Act is so plain that the commonest intellect can understand its meaning, and the oft repeated rulings of this court have left no shadow of doubt as to the right of suitors in cases strictly within admiralty jurisdiction, to bring their actions at common law, *in personam*, as was done in these cases. And it is submitted that these writs come within rule 6, it being manifest that they tend to delay only, and that the question as to jurisdiction "is so frivolous as not to need further argument."

Having said this much on the first two reasons assigned for dismissal, we come to the third reason, raising the question, that the several amounts in dispute in these cases, as well as the judgments, do not amount to $5,000.00, as required by the Act of February 16, 1875, and therefore this court has no jurisdiction.

The Judiciary Act authorizing writs of error from the Supreme Court of the U. S. to the highest State Courts, Rev. Stat., § 709 and § 1003, Act of 1789, together, place writs of error to the U. S. Courts, and the State Courts, on the same basis; and the latter is in these words: "Writs of error from the Supreme Court of the United States to a State Court in cases authorized by law, shall be issued in the same manner, *and under the same regulations*, and shall have the same effect as if the judgment, or decree com-

plained of, had been rendered or passed in a Court of the United States." The original Act limited writs of error to judgments exceeding $2,000.00; and the Act of February 16, 1875, 18 Stat. 316 increased the limitation to $5,000.00. If these actions had been brought in the United States Circuit Court, or had been certified to that Court, a writ of error would not lie, if the amount in dispute did not exceed $5,000.00; and if writs to State Courts "shall be issued in the same manner, *and under the same regulations,*" and with like effect, as if these judgments had been rendered in the Circuit Court of the United States, then the writs of error in these cases must be dismissed for want of jurisdiction.

Counsel for defendants in error therefore respectfully submit, that the writs should be dismissed, and the judgments affirmed with damages and costs. 93 U. S. R. 233, 100 Ib. 7.

The amount in controversy at the time of the judgment, not considering interest subsequently accrued, determines the jurisdiction. 2 Howard 73, Knapp vs. Banks.

GEO. SHIRAS, JR.
JOHN BARTON,.
ALEX. M. WATSON,
Attorneys for Motion.

APPENDIX.

IN THE

SUPREME COURT OF PENN'A, WESTERN DISTRICT,

No. 261 and 311 Oct. and Nov. Term, 1879.

FIRST CASE.

SAMUEL S. BROWN, et al.
Plaintiffs in Error,
vs.
JOHN GILMORE,
Plaintiff Below.

Error to the Court of Common Pleas No. 1 of Allegheny County, at No. 572 of June Term, 1877.

NAMES OF PARTIES AND ABSTRACT OF PROCEEDINGS IN THE COURT BELOW.

JOHN GILMORE
vs.
SAMUEL S. BROWN
AND
JAMES M. SCHOONMAKER.

Summons case to the first Monday in May, 1877. Service accepted May 3, 1877. August 11, 1877, defendants plead "not guilty." January 14, 1879, on trial list and jury sworn. And now June 17, 1879, by leave of Court, the plaintiff amends his declaration. June 21, 1879, verdict for the plaintiff for $3284.04. And now June 23, 1879, motion and reasons for a new trial and in arrest of judgment filed by leave of Court. July 12, 1879 on argument list, and motion overruled. July 23, 1879 Sheriff's receipt for verdict fee filed, and jugdment on the verdict. August 2, 1879, writ of error filed, and record sent up. January 13, 1880 remittitur filed showing judgment affirmed.

SECOND CASE.

SAMUEL S. BROWN, et al.
Plaintiffs in Error,
vs.
R. HENDERSON & Co.
Plaintiffs Below.

Error to the Court of Common Pleas No. 1 of Allegheny County, at No. 166 September Term, 1877.

NAMES OF PARTIES AND ABSTRACT OF PROCEEDINGS IN THE COURT BELOW.

JOHN N. DAVIDSON, JOS. DAVIDSON, THOMAS W. WATT AND ROBERT HENDERSON, partners as R. HENDERSON & CO.
vs.
SAMUEL S. BROWN, JAS. M. SCHOONMAKER and JAMES H. BROWN, doing business as H. H. BROWN & Co.

Sum. case to 1st Monday of July, 1877. Affidavit filed for $2,-295.75, interest from September, 1876. June 26, 1877 service accepted for defendants. August 11, 1877 defendants plead "not guilty." January 14, 1879, on trial list and jury sworn, and January 21, 1879, verdict for the plaintiffs in the sum of $4,581.13. January 23, 1879, motion and reasons for a new trial and in arrest of judgment filed by leave of Court. September 3, 1879, on argument list, and new trial refused. September 3, 1879, Sheriff's receipt for verdict fee filed, and judgment on verdict. September 13, 1879, writ of error filed and record sent up. January 13, 1880 remittitur filed showing judgment affirmed.

The Act of February 16, 1875, 18 Stat. 316, provides, that "judgments and decrees hereafter rendered, shall not be examined in the Supreme Court, unless the matter in dispute shall exceed the sum of *five thousand dollars*, exclusive of costs."

Act of 1789, Sec. 1003, Rev. U. S. Statutes.

"Writs of error from the Supreme Court of the United States to a state court in cases authorized by law, shall be issued in the same manner, and under the same regulations, and shall have the same effect as if the judgment, or decree complained of, had been rendered or passed in the Court of the United States."

SUPREME COURT U.S.
FILED
OCT 22 1880

IN THE

Supreme Court of the United States,

Nos. 878 and 879, October Term, 1880.

James M. Schoonmaker, Samuel S. Brown, and James H. Brown, Plaintiffs in Error,

VERSUS

John N. Davidson, Joseph Davidson, T. W. Watt, and R. Henderson, partners as R. Henderson & Company, for use of Robert Henderson and Samuel Watson, Administrators of R. Henderson, Defendants in Error,

AND

James M. Schoonmaker & Samuel S. Brown, Plaintiffs in Error,

VERSUS

John Gilmore, Defendant in Error.

Error to the Supreme Court of Pennsylvania, Western District,

At Nos. 261 and 311 of October and November Term, 1879.

IN RE MOTION TO DISMISS THE WRITS OF ERROR.

HILL BURGWIN,

Counsel for Plaintiffs in Error and against Motion.

In re Motion to Dismiss the Writs of Error and Affirm the Judgments of the State Court.

Reply of Counsel for Plaintiffs in Error.

It would seem that the counsel on the other side have quite mistaken the purport of the Rule on which this motion is founded, when they present an elaborate Argument of four printed pages, to prove that the question presented by this Record is "so frivolous as not to need further argument."

Is it not an attempt to have the case argued on its merits, in advance of its proper time on the Calendar?

The Writ in this case was issued on a Special Allocatur from one of the Justices of this Court, after examination of the Record, and at least some consideration of the question it presents.

I scarcely think it necessary therefore to present an argument in advance of the regular hearing, that such question is not so manifestly frivolous as to call for a dismissal by the Court without an argument from the other side. I may say however that this Writ of Error has been taken in good faith in order to present for the consideration of the Court a question, which I think has never yet been determined by it, namely: whether the Courts of the United States have not exclusive jurisdiction in cases of collision between vessels on navigable waters. I think this case may fairly be distinguished from Leon vs. Galceron, 11 Wall, 188.

In Martin vs. Hunter, 1 Wheat. 304, Story, J., says: "The admiralty and maritime jurisdiction is of the same exclusive cognizance;" and in State vs. McBride, Rice (S. C.) Rep. 400–414, the Court cite Martin vs. Hunter as more thoroughly discussed and maturely considered than any cause ever heard in the American Courts; and following that case it is then said, that of all those classes of cases to which the judicial power of the United States extends (Constitution, Art. 3, Sect. 2,) in the first ~~three~~ three enumerated, cases of admiralty and maritime jurisdiction being the third, the jurisdiction of the U. S. Courts is exclusive.

In commenting on the same clause of the Constitution, Chief Justice Tilghman says, Mannhardt vs. Soderstrom, 1 Binney, 138: "In cases of admiralty and maritime jurisdiction, the Courts of the United States have always exercised an exclusive jurisdiction, and in disputes between citizens of different States, they have exercised a jurisdiction concurrent with the state courts."

"The jurisdiction of the District Courts in civil causes of admiralty is exclusive of all others. No State Court can entertain such cases."—Benedict's Admiralty, Section 313. And the reasons for such exclusive jurisdiction as given by Judge Benedict are two-fold—that transactions so peculiar as those of the sea should be exercised by Judges schooled in the principles and mysteries of such transactions, and not left to the uncertain chances of juries familiar only with the usages and necessities of the land. Benedict's Admiralty, Section 196. And again, Section 206, he speaks of this jurisdiction as made *National*, because by common consent of civilized nations maritime transactions should be subjected to the *vera lex*, as recognized by all, without legislative sanction, and that the rights of citizens of the different States, might be subjected to a general and unbiassed tribunal and not to a local, prejudiced or partial one, as would be if local Courts should retain this class of cases.

These reasons are peculiarly appropriate to cases of collision of vessels on navigable waters, involving as they mostly do, complicated questions in the science and art of navigation.

As to the question of jurisdiction which is raised by the other side, upon the amount involved in this controversy, it was raised and overruled in Buel vs. Van Ness, 8 Wheaton, 312.

HILL BURGWIN,

Counsel for Plaintiffs in Error.